



MANAGEMENT SYSTEM ASSESSMENT REPORT

VISIT DATE(S): MAY 21-25, 2007

COMPANY: BROOKHAVEN NATIONAL LABORATORY

STREET ADDRESS: BLDG. 800, P.O. BOX 5000 (EMS); 40 BROOKHAVEN AVE., BLDG. 130 (OSHMS)

CITY, STATE ZIP: UPTON, NY 11973

COUNTRY: USA

FRS NUMBER: 69525, 69528

VISIT TYPE: REASSESSMENT

STANDARD: ISO 14001:2004, OHSAS 18001:1999

LEAD AUDITOR: KEN CLAYMAN IAF: 35

AUDITOR: BRIANA SPRAGUE IAF: 35

AUDITOR: DAWN HENDERLIGHT IAF: 35

AUDITOR: GORDON BELLEN IAF: 35

REPORT DATE: JUNE 11, 2007

For QMS or EMS single sites and QMS corporate schemes - each site will have a separate report.
QMS and EMS Campus type audits may include all sites in one report.

Form Version 4.0

INTRODUCTION

Name of Company and Location Brookhaven National Lab, Upton, NY	Date of Audit: May 21-25, 2007
Type of Audit and Standard Surveillance of ISO 14001:2004, OHSAS 18001:1999	Duration (days; must match quote): 20 FRS No.(s): 69525, 69528
Total Number of Employees: 2570	Certificate Expiration Date: EMS – 6/24/07; OHSAS Phase 1 – 10/10/07, Phase 2 – 12/1/08
Scope Statement has been verified: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
FRS Changes Since Last Audit: Has any of the following changed since last audit: See FRS' for actual changes. <input checked="" type="checkbox"/> Address <input type="checkbox"/> E-mail <input type="checkbox"/> Telephone <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Invoicing Information <input checked="" type="checkbox"/> Mgt. Rep. (Division ER) <input type="checkbox"/> Supplier codes <input type="checkbox"/> Audit Frequency <input checked="" type="checkbox"/> Other Describe in detail:	
Confidentiality and non-disclosure agreement has been signed by all auditors and is on file with NSF-ISR	
Executive Summary (list positive practices, summary type of findings, auditors' evaluation of the condition of the MS, note any positive or negative trends) Recommending for continued registration/certification to both Standards throughout the Lab. Continual Improvements/System Strengths identified during this audit included: <ul style="list-style-type: none"> • Linkage between institutional objectives and Directorate and other levels of the organization's objectives and targets – process and documentation has become much clearer. • Internal Audit records and documentation (Institutional Level) – very well done, easy to follow and understand; provides good and clear evidence of the process and, therefore, conformity to requirements. • Management Reviews – improved demonstration of use of various and required inputs, discussion of information and data and the decisions and outputs made by management during these meetings. • C-AD/SMD – Moving all of their E/OSH MS documentation to an electronically controlled state – well done! • The Lessons Learned process is an effective tool for communication. It helps communicate preventive actions throughout the laboratory. Its effectiveness was evident by the Intellectual Property and Sponsored Research Group developing safety guidelines for the move to Building 185 because they had read this in the Lessons Learned system. • The Instrumentation Division has had a significant reduction in hazardous waste over the last six years. • There is a strong safety culture in the ERP Directorate. (A good place for it.) • Use of Iris Scanning technology in NSRL to restrict use of high hazard areas from personnel who have not completed all required training. • IH Division – Procedural documentation very clearly written and nicely formatted. • IH Lab – Well organized, good systems in place for identification and tracking of equipment to ensure calibrations are current • Training and work permits were completed for individuals moving to new buildings to prevent injuries • EENS uses innovative awareness-raising techniques such as Jeopardy game. Positive and frequent communication between EHS Coordinators and employees throughout all areas audited. • Record storage and access of PM worker orders is excellent. Records throughout lab are well-organized and identified. • Various groups demonstrated extra commitment to emergency response (ex. Information Services – FY07 O&T for extra drill, Diversity Office – active participation in Bldg 400 ORE and EENS – ES Subject Area Committee). • IH Noise Level Monitoring & Evaluation Handbook and poster for Motor Pool – excellent and practical worker aid providing clear information regarding hearing protection for work activity hazards in this area. • CEGPA - Efforts to integrate Tier 1 inspection reporting and tracking demonstrates the directorates emphasis on internal synergy and reduction of duplicity. 	

- CEGPA -Community outreach and internal/external publications support the Lab's commitment to interested parties.
- CEGPA - The Incident Assessment Plan for the new building ceremony 5/21/07 was very comprehensive with regards to safety, health and environmental priorities.
- BESD -JRA's are well documented and revised with excellent documentation regarding needs for revisions, be it based on regulatory changes, incidents both at BNL or noted in ORPs from other labs, with an emphasis on prevention of recurrence and potential occurrence.
- BESD staff demonstrated proactive measures towards addressing potential S/H/E risks through the "Jumpstart" initiative with future users of the CFN facility participation in ESR'/JRA'/FRA' as the facility is brought "on line".
- BESD -Students interviewed were articulate in response to questions regarding their awareness of responsibilities and requirements of the EMS/OHSAS.
- NSLS -D-Base utilized for tracking of Tier 1 inspection findings is an effective tool for trending and prioritizing risks and resources.
- NSLS -Excellent display of EH&S signage in the beam area. Additionally, safe work practices were observed such as bonging for drum containing flammable aerosols, with lid closure fixtures to ensure compliance requirements are adhered to.
- NSLS -Emergency Drill Summary Report dated 2/07 is very comprehensive and informative. It was also traceable to action items and closure responses for needed improvements identified as a result of the drill conducted 10/03/06.

Based on the numbers of nonconformance's identified by the NSF-ISR audit team the Company's **internal audit system** and overall management system is acceptable.

No. of New Majors: 0	No. of New Minors: 1	No. of OFI's: 6
Previous CARs Not Closed: 0	Previous Majors Closed: NA	Previous Minors Closed: 5

RECOMMENDATIONS:

The Closing Meeting was held on May 25, 2007 with management to summarize the audit results. Based on the results of the audit, the audit team will make the following recommendation to NSF-ISR Management:

☒ **RECOMMENDATION FOR CONTINUED REGISTRATION.**

☐ **RECOMMENDATION FOR REGISTRATION FOLLOWING VERIFICATION OF CORRECTIVE ACTION** - There are one or more nonconformances that, in the judgment of the lead auditor, can be corrected by the Company and verified by an auditor without a full re-audit.

☐ **RECOMMENDATION FOR ON SITE REASSESSMENT** - There are several nonconformances that represent a breakdown of the Company's management system. Another full onsite audit is required.

Changes Since Last Audit: Describe changes in operations, specifications, organization, responsibility, Management System documentation, acquisitions/closures, etc., since the previous audit. Also, include a summary of evidence of continuous improvements.

See first section of audit notes pages.

Use of the NSF-ISR Registration Mark: During the audit visit the auditor reviewed the organization's use of the NSF-ISR registration mark and determined that: *(check one box)*

☐ The Mark is NOT being applied.

☐ The Mark is NOT being applied correctly and the organization is NOT properly advertising their Registration.

☒ The Mark is being applied correctly and the organization is properly advertising their Registration.

☐ Other: _____

Based on the numbers of nonconformance's identified by the NSF-ISR audit team the Company's **internal audit system** and overall management system is **acceptable**.

This report will be submitted to NSF management for its (continuing) registration determination.

DEFINITIONS:

Nonconformance:

Major – The absence or complete breakdown of an element of the management system. A number of minor nonconformances against one element can represent a total breakdown of the system and thus be considered a major nonconformance. A major could also be a nonconformance that would result in the probable shipment of nonconforming product or reduce the usability of the product or service for its intended use or a nonconformance that would result in the failure of the management system or materially reduce its ability to assure controlled processes and products. A major might also be written as a result of a significant environmental incident.

Minor – A single observed nonconformance. A minor nonconformance shall not generally be a reason to withhold registration unless, in the judgment of the audit team, the minors are numerous that it represents a breakdown of the standard element or Company's management system.

Opportunity for Improvement – A finding not determined to be a nonconformance but which, in the opinion of the audit team, would be a management system improvement.

Corrective Action Plan Closure Requirements

Corrective Action shall be applied to the identified major/minor. Corrective action impact analysis shall be extended to all areas where similar nonconformance may exist and as applicable.

The Company shall perform a root cause analysis and define corresponding corrective actions to be implemented as soon as possible and within 90 days of this visit. The Company shall inform the lead auditor of corrective actions and target date for implementation. Corrective action should be extended to all areas where similar nonconformance may exist. Corrective action should also be taken on all nonconformances regardless of the process rating.

Organization CAR Closure Process:

The auditor will review the CAR plan for the following elements-

1. Determine / document any immediate action required / taken
2. Determine the Cause of the Problem (e.g. True Root Cause, 5 why's)
3. Evaluate Action needed on the Identified Cause
4. Determine if the problem exists elsewhere in the system and implement actions needed
5. Document the results of the action taken
6. Review/Verify and document effectiveness of Action taken with objective evidence

NOTE: Closure shall be documented using the company's internal implemented Corrective Action process, and with attachment of supporting evidence. (i.e. Training records, revised procedures, etc)

☐ Plan Required in 7 days ☒ Plan Required in 30 Days ☐ Corrective Action Plan Not Required
☐ Other (Explain):

Corrective actions shall be mailed to: Ken Clayman
6125 Fox Point Road
Fredericksburg, VA 22407
kaclayman@gmail.com
703-995-4857 (Fax)

Opening Meeting Date: May 21, 2007

Attendance: Ken Clayman-NSF Lead Auditor; B. Sprague-NSF Auditor; D. Henderlight-NSF Auditor; G. Bellen-NSF Auditor; R. Selvey-IH Manager; B. Schwaner-TQ Manager; R. Karol-C-AD ESHQ Division Head; E. Lessard-C-AD ESSHQ Assoc. Chair; S. Bronson-Education Administrator; P. Carr-EENS E/OSHMS Representative; T. Lambertson-Manager CFS Division; B. Heneveld-S&IH Manager; M. Israel-Director of Internal Audit & Oversight; B. McNair-Manager IA&O; T. Maugeri-OMS/HR/POC; S. Stein-QMO/EWMSD QR/POC; E. Murphy-Manager Plant Engineering; D. Lovenstein-Chairman C-AD; R. Bielgelman-Gen'l Counterintelligence Officer; P. Williams-Manager SHSD; J. Selva-EMS Program Manager; M. Bebon-Deputy Director Operations; R. Dinardo-Instrumentation Division; S. Ferrone-EWMSD/ECR; M. Heinrich-ESH Coordinator; J. Amabile-SSD; B. Royce-F&O Directorate; J. Wilke-Quality Management Office; R. Chmiel-NSLS; R. Ondrovic-Inventory Manager; G. Droguardi-PR Supv. Inventory; M. Peterson-Manager Inventory Services Division; K. Klaus-ECR; A. Emrick-EMS/OHSAS Rep Life Sciences; C. Anderson-Chair BO; G. Ceranzen-USDOE-BHSU; M. VanEssendelft-ECR; K. White-OEP Manager; G. Goode-EWMSD Director; N. Bernholc-CIH POC; W. Litzke-HP; J. Indusi-NN; A. Gray-ESH Coordinator; P. Pohlot-ECR; C. Schaefer-Radcon Manager; D. Bauer-ECR

Closing Meeting Date: May 25, 2007

Attendance: Ken Clayman, B. Sprague; D. Henderlight; G. Bellen; R. Selvey; B. Schwaner; R. Karol; E. Lessard; S. Bronson; P. Carr; T. Lambertson; B. Heneveld; M. Israel; B. McNair; T. Maugeri; S. Stein; E. Murphy; D. Lovenstein; R. Bielgelman; P. Williams; J. Selva; M. Bebon; R. Dinardo; S. Ferrone; M. Heinrich; J. Amabile; J. Wilke; R. Chmiel; G. Droguardi; M. Peterson; K. Klaus; A. Emrick; C. Anderson; G. Ceranzen; M. VanEssendelft; K. White; G. Goode; N. Bernholc; W. Litzke; J. Indusi; A. Gray; P. Pohlot; C. Schaefer; J. Taylor; R. Backofen; J. Tarpinian; C. Harris; A. Ackerman; R. Sabatini; J. Peters; R. Gill; R. Costa; T. Ludlam; S. Aronson; K. Conkling; P. Bond; D. Lowenstein; F. Henn; N. Gmur; P. Flood; G. Dioguerd; R. Ondrovic

Opening Meeting Topics	Closing Meeting Topics
Introduction - Discuss Role of Each Auditor	Stress Appreciation for Cooperation/Hospitality
Leave Continuous Improvement Survey with Management Representative	Attendance Sheet Circulated
Attendance Sheet Circulated (if necessary)	Customer Review and Approval of FRS including Scope Statement on the FRS (review with client)
Confirm Confidentiality/Nondisclosure Agreement	State Purpose of Meeting
Review Scope/Objectives of Audit	Recommendation of Audit Team
Discuss Audit Process: Sample of Management System	Management System Strengths/Features
NSF-ISR Checklist / Objective Evidence	Management System Features to be Improved
CARs - Auditor/Auditee Responsibilities	Audit Report Summary: Definitions of Major/Minor Non-Conformance Audit Summary Sheet - Conformance to Audit Standard Review Scope/Objective of Audit/Sampling of Management System
Definition of Major/Minor Non-Conformance/opportunity for improvement	Corrective Action Response (CARs) Request Process: 1) Identify Immediate Problem 2) Root Cause Analysis 3) Prevention (<i>solicit commitments and timing of implementation</i>)
Appeals Process	Final Report - process/content/timing
Audit Summary Sheet - Conformance to audit standard	Confidentiality
Daily Meetings	Appeals Process
Define Three Registration Recommendation Types	Explain Verification Audit, If Applicable
Closing Meeting Time/Date/Place	If Recommendation is to Register: N/A
Review site safety/emergency procedures	Management System Changes, if applicable
Review Audit Schedule (<i>revise as needed</i>)	Registrar Changing Rules
Confirm Escort/Guide	Maintaining Customer Complaint Record
Identify and Clarify Communication Links	Surveillance Audits
Confirm Working Arrangements - hrs/lunch/auditor facilities	Use of NSF-ISR Mark

CORRECTIVE ACTION REQUESTS: (OFI's should be numbered as OFI-1, OFI-2, etc.)

Previous Audit Findings – Evidence of Closure

CAR No.: BNL-SA06-2	STANDARD NO. AND CLAUSE: ISO 14001:2004, OHSAS 18001:1999, Clauses 4.4.5	LOCATION OF FINDING: Noted in Evidence	
TYPE: Minor	DISCUSSED WITH: Representatives from each division or area noted	FRS: 69525, 69527, 69528 AUDIT DATE: 6/19-23/06	
STATEMENT OF REQUIREMENT: Management System documents shall be maintained under controls per procedures. Obsolete documents must be removed from circulation to prevent unintended use. Documents must be available at points of use.			
STATEMENT OF NONCONFORMITY: Evidence of documents that are not being controlled properly was found in the noted Lab areas/divisions/locations. This included evidence of not removing obsolete documents from unintended use, not providing appropriate revision information on controlled documents, and not having documents at points of use.			
OBJECTIVE EVIDENCE: F&O-Staff Services Division, Motor Pool - Using JRAs identified as "Draft" release, while the actual release is Rev. 1, 4/28/06; EWMSD LTRA - O&M Manual was not present at the OS-1 groundwater treatment facility as required in the Standard and EWMSD procedures; F&O-HEMO - Parts Washer Operating Rules, posted near the equipment did not include control information such as Revision/Date; BESD, Superconducting Group lab – Metal Powder Glove Box binder included a procedure with no evidence of document control (revision information, etc.).			
AUDITOR REVIEW OF COMPANY'S CORRECTIVE ACTION: COMMENTS: Audit team reviewed evidence of corrections and corrective action that has occurred and/or is in process. Lab has initiated a long-term corrective action to try to completely identify all incidents of document control violations and address all actual and potential root causes. Some efforts, such as in SHSD have already proved very helpful in improving the management systems. STATUS: Closed AUDITOR: K. Clayman DATE: 5/25/2007			

CAR No.: BNL-SA06-3	STANDARD NO. AND CLAUSE: ISO 14001:2004, Clause 4.6	LOCATION OF FINDING: Superconducting Magnet Division	
TYPE: Minor	DISCUSSED WITH: Environmental Compliance Representative, SMD ESH Coordinator, SMD QA Manager	FRS: 69525 AUDIT DATE: 6/19-23/06	
STATEMENT OF REQUIREMENT: ISO 14001:2004, Clause 4.6 requires particular inputs to be included in periodic Management Reviews. These inputs include review of external environmental communications and/or complaints and review of follow-up actions from previous Management Review meetings.			
STATEMENT OF NONCONFORMITY: There was no evidence that SMD included all required inputs during the Management Review conducted in February 2006.			
OBJECTIVE EVIDENCE: Based on review of the SMD Management Review Meeting Minutes and Presentation records, SMD did not include the required inputs regarding external environmental communications and/or complaints, and review of follow-up actions from previous Management Review. The ECR and SMD ESH Coordinator confirmed that these inputs had not been included in the Review meeting discussions. These inputs are required according to ISO 14001:2004 Subclauses 4.6.b and 4.6.f.			

AUDITOR REVIEW OF COMPANY'S CORRECTIVE ACTION: COMMENTS: Reviewed most recent SMD Management Review records and interviews with SMD personnel show that the issue in this department has been resolved. Changes to the Subject Area in SBMS also should prevent recurrence of this issue if the requirements are followed. STATUS: Closed AUDITOR: K. Clayman DATE: 5/25/2007		
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CAR No.: BOSH-4	STANDARD NO. AND CLAUSE: OHSAS 18001:1999, Clause 4.3.4	LOCATION OF FINDING: JRAs/FRAs for SHSD, RadCon, QMO groups
TYPE: Minor	DISCUSSED WITH: SHSD, QMO, RadCon Representatives	FRS: 69528 AUDIT DATE: 12/4-7/2006
STATEMENT OF REQUIREMENT: SBSM Interim Procedures 2004-18001-001 & -002 Facility and Job Risk Assessments (respectively, 11/05 revisions) require that the risk factors are re-estimated/recalculated once newer, additional controls are developed and implemented for the identified, associated hazard(s).		
STATEMENT OF NONCONFORMITY: Risk factors were not re-estimated/recalculated in JRAs or FRAs prepared by the three groups within the ESH&Q Directorate.		
OBJECTIVE EVIDENCE: The following FRAs/JRAs showed additional controls had been developed/implemented for the associated hazards, but the risk factors had not been re-estimated/recalculated: FRA-QMO-01, SHSD-JRA-15, FS-FRA-01, FS-JRA-01.		
AUDITOR REVIEW OF COMPANY'S CORRECTIVE ACTION: COMMENTS: STATUS: Closed AUDITOR: K. Clayman DATE: 5/25/07		

CAR No.: BOSH-5	STANDARD NO. AND CLAUSE: OHSAS 18001:1999, Clause 4.4.5	LOCATION OF FINDING: Educational Office, OMC, CMS
TYPE: Minor	DISCUSSED WITH: Gail Donoghue, Terry Maugeri, Bob Petricek	FRS: 69528 AUDIT DATE: 12/4-7/2006
STATEMENT OF REQUIREMENT: The Organization shall establish and maintain procedures for controlling all documents required...		
STATEMENT OF NONCONFORMITY: Several local documents in various departments were in use but not included under document control requirements.		
OBJECTIVE EVIDENCE: --CMS New Employee orientation and training checklist (Uncontrolled copy in use, controlled by IH50350) --Education department's instructions for the conduct of cryogenic or other chemistry experiments (uncontrolled) --OMC hearing threshold shift guidelines (Dated 2003, current documents are integrated with the reporting computer program).		
AUDITOR REVIEW OF COMPANY'S CORRECTIVE ACTION: COMMENTS: Audit team reviewed evidence of corrections and corrective action that has occurred and/or is in process. Lab has initiated a long-term corrective action to try to completely identify all incidents of document control violations and address all actual and potential root causes. Some efforts, such as in SHSD have already proved very helpful in improving the management systems. STATUS: Closed AUDITOR: K. Clayman DATE: 5/25/2007		

CAR No.: BOSH-6	STANDARD NO. AND CLAUSE: OHSAS 18001:1999, Clause 4.3.2	LOCATION OF FINDING: Safety and Health Services Division	
TYPE: Minor	DISCUSSED WITH: SHSD IH Manager	FRS: 69528 AUDIT DATE: 12/4-7/2006	
STATEMENT OF REQUIREMENT: The Organization shall establish and maintain a procedure for identifying and accessing the legal and other occupational health and safety requirements and keep this information up to date.			
STATEMENT OF NONCONFORMITY: Internal BNL IH procedure Industrial Hygiene Requirements Management does not include a regulatory driver for regulation 29 CFR 1910.95 for Hearing Protection, although this regulation has been identified by the SMBS Noise and Hearing Conservation Subject Area.			
OBJECTIVE EVIDENCE: The quarterly review of regulations for 29 CFR 1910.95, required by the Industrial Hygiene Requirements Management Procedure IH50700, rev 11/01/05, was not performed. This particular regulation is not listed on the Attachment 1 form, Industrial Hygiene Regulatory Drivers; however it is referenced in the SBMS Noise and Hearing Conservation Subject Area.			
AUDITOR REVIEW OF COMPANY'S CORRECTIVE ACTION: COMMENTS: Evidence reviewed during the Reassessment audit identified that there has been corrections and corrective actions taken to address this issue. An ongoing action was in process at the time of the audit to further institutionalize preventive measures to avoid further similar incidents of this kind.			
STATUS: Closed		AUDITOR: K. Clayman	DATE: 5/25/07

New Audit Findings - Reassessment

CAR No.: OFI-1	STANDARD NO. AND CLAUSE: ISO 14001:2004, OHSAS 18001:1999, Clauses 4.4.7	LOCATION OF FINDING: Lab-Wide
TYPE: OFI	DISCUSSED WITH: Various Personnel from SHSD, Emergency Services and other Directorates	FRS: 69525 AUDIT DATE: 5/21-25/07
STATEMENT OF REQUIREMENT: The organization shall review and where necessary revise emergency response procedures, particularly following actual incidents.		
STATEMENT OF NONCONFORMITY:		
OBJECTIVE EVIDENCE: Consider methods to improve the critique and effectiveness review of emergency procedures for both planned drills and response to real or false alarms.		
AUDITOR REVIEW OF COMPANY'S CORRECTIVE ACTION: COMMENTS:		
STATUS: AUDITOR: DATE:		

CAR No.: OFI-2	STANDARD NO. AND CLAUSE: ISO 14001:2004, 4.3.3	LOCATION OF FINDING: Lab-wide
TYPE: OFI	DISCUSSED WITH: P2 Coordinator for F&O, PPM Manager, various EHS Coordinators	FRS: 69525 AND 69528 AUDIT DATE: MAY 21-25, 2007
STATEMENT OF REQUIREMENT: The organization shall establish, implement and maintain a procedure to monitoring and measure the key characteristics of its operations that can have a significant environmental impact...		
STATEMENT OF NONCONFORMITY: N/A		
OBJECTIVE EVIDENCE: Consider formalizing the paper use reduction program by better linking the data for purchasing/use and recycling of paper. Consider raising awareness of proactive approaches to reducing paper use such as decision-making for copier and printer purchases, minimization of printed meeting materials, and default settings for duplex copying and printing.		
AUDITOR REVIEW OF COMPANY'S CORRECTIVE ACTION: COMMENTS:		
STATUS: AUDITOR: DATE:		

CAR No.: OFI-3	STANDARD NO. AND CLAUSE: ISO 14001 and OHSAS 18001, 4.4.5	LOCATION OF FINDING: SBMS
TYPE: OFI	DISCUSSED WITH: EENS EHS Coordinator	FRS: 69525 AND 69528 AUDIT DATE: MAY 21-25, 2007
STATEMENT OF REQUIREMENT: Documents ...shall be controlled. Procedure shall include that changes and the current revision status of documents are identified.		
STATEMENT OF NONCONFORMITY: N/A		

OBJECTIVE EVIDENCE: There is an opportunity to clarify the revision identifiers on SBMS documents. The footer of every SBMS document says, "Before using a printed copy, verify that it is the most current version by checking the last modified date (at the top of each subject area and bottom of other pages/document)." The dates at the top and bottom of the pages are different. The modified date at the top appears to indicate major revisions and the dates at the footers indicate latest minor revisions. The SBMS Subject Area does not mention this footer requirement and recommends users to access to the revision history link for each document.		
AUDITOR REVIEW OF COMPANY'S CORRECTIVE ACTION: COMMENTS:		
STATUS: AUDITOR: DATE:		

CAR No.: OFI-4	STANDARD NO. AND CLAUSE: OHSAS 18001, 4.4.6	LOCATION OF FINDING: Fire House
TYPE: OFI	DISCUSSED WITH: Acting Manager of ES Division	FRS: 69525 AND 69528 AUDIT DATE: MAY 21-25, 2007
STATEMENT OF REQUIREMENT: The organization shall plan activities in order to ensure that they are carried out under specified conditions...		
STATEMENT OF NONCONFORMITY: N/A		
OBJECTIVE EVIDENCE: There is an opportunity to improve the PM procedures used by the ES division to track whether fire protection inspections have been completed. The process does not currently include a mechanism to review if there is a backlog.		
AUDITOR REVIEW OF COMPANY'S CORRECTIVE ACTION: COMMENTS:		
STATUS: AUDITOR: DATE:		

CAR No.: OFI-5	STANDARD NO. AND CLAUSE: OHSAS 14001, 4.4.6	LOCATION OF FINDING: Information Technology
TYPE: OFI	DISCUSSED WITH: EHS Coordinator for ITD	FRS: 69525 AND 69528 AUDIT DATE: MAY 21-25, 2007
STATEMENT OF REQUIREMENT: The organization shall plan activities in order to ensure that they are carried out under specified conditions...		
STATEMENT OF NONCONFORMITY: N/A		
OBJECTIVE EVIDENCE: There is an opportunity to improve the storage and management of aerosol can puncturing for small organizations who do not have their own can puncturing stations.		

AUDITOR REVIEW OF COMPANY'S CORRECTIVE ACTION: COMMENTS:		
STATUS:	AUDITOR:	DATE:

CAR No.: BNL-RA-6	STANDARD NO. AND CLAUSE: ISO 14001:2004, CLAUSE 4.5.3	LOCATION OF FINDING: EP: Refrigeration Maintenance
TYPE: Minor	DISCUSSED WITH: F&O EHS Manager	FRS: 69525 AND 69528 AUDIT DATE: MAY 21-25, 2007
STATEMENT OF REQUIREMENT: The organization shall establish and maintain a procedure for dealing with actual and potential nonconformities.....		
STATEMENT OF NONCONFORMITY: An issue was identified in a Jan 18, 2007 self assessment which was not entered into the family ATS and was not addressed.		
OBJECTIVE EVIDENCE: The need for calibration of the scales used to weigh refrigerant containers was identified in a compliance review of a self assessment of the refrigerant management program dated January 18, 2007. The issues was not addressed and is not entered into the family ATS for tracking and completion.		
AUDITOR REVIEW OF COMPANY'S CORRECTIVE ACTION: COMMENTS:		
STATUS:	AUDITOR:	DATE:

CAR No.: OFI-7	STANDARD NO. AND CLAUSE: OHSAS 18001:1999 4.3.1, 4.5.2	LOCATION OF FINDING: CEGPA
TYPE: OFI	DISCUSSED WITH: RICK BACKOFEN	FRS: 69525 AUDIT DATE: MAY 21-25, 2007
STATEMENT OF REQUIREMENT: Hazards and risks will be reassessed prior to implementation of corrective and preventive actions and changes will be recorded.		
STATEMENT OF NONCONFORMITY:		
OBJECTIVE EVIDENCE: As a result of an injury, JRA PG-Cutter was reviewed and revised on 3/20/07. The "reason for revision" is noted as due to occurrence of incident. An additional control was added to one task, the risk ranking was reassessed however the risk ranking did not change. Consider recording that a review is conducted on the entire JRA, what changes/controls will be implemented, especially if the risk ranking will not be reduced.		
AUDITOR REVIEW OF COMPANY'S CORRECTIVE ACTION: COMMENTS:		
STATUS:	AUDITOR:	DATE:

AUDIT NOTES:

Processes	Location/Observations
Changes	<p>Center for Functional Nanomaterials – building has been completed and the personnel will begin moving into the facility soon (ribbon-cutting first day of audit). Light Source II building project ramping up (recently approved to begin design activities; NEPA study completed).</p> <p>J. Tarpinian – ESH&Q Director will be leaving BNL in about 2 months (moving to Battelle Headquarters). He is the OSH MS Management Representative. New representative will be selected at a later date (under discussion presently)</p>
<p>Objectives, Targets, Programs, Measures & Metrics (E&O – 4.3.3, 4.4.1, 4.4.3, 4.4.4, 4.5.1, 4.6; O – 4.3.4, 4.5.2, 4.5.3; E – 4.5.3, 4.5.4</p>	<p>Identify process inputs and describe their interactions with the process: FY07 Environmental Objectives & Targets (11/13/06); FY07 OSH Objectives & Targets (11/9/06); FY2007 Operations Business Plan (12/15/06); ISM/Safety Improvement Project Plan (2006); Annual Laboratory Plan (ALP; 11/15/06)</p> <p>Process Objective(s): Ensure the establishment of E/OSH objectives and targets based on appropriate criteria (noted in the Standards) that help the organization to achieve E, H&S performance improvements. Also, ensure that programs are developed that define how the organization plans to achieve these goals.</p> <p>Describe whether the process is effective or not: Yes – This area has been a work in progress over the several years that the Systems have existed, and as a result is showing very strong signs of improvement. There is a much clearer link present between the establishment of institutional level objectives/goals and those that are created at the Directorate or other levels of the Lab. This has been identified as a Noteworthy practice.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): The noted documents for E/OSH O/Ts are considered the institutional level goals – they are directly related to and flow down from the Business Plans, Improvement Project Plan, Laboratory Plan and associated DOE requirements included in the Contract with the Lab. Directorates, Departments, Divisions, etc. are expected to select the specific O/Ts applicable/relevant to their activities/operations and develop the management programs to define how they intend to achieve the goals. Monitoring/Measurement (M/M) data are provided from these “lower” levels to the institutional Lab levels (to the management representatives), where they are collated, analyzed and used as part of the Lab-level Management Reviews inputs.</p> <p>Some of the target deadlines in the FY06 and FY07 OSH O/Ts/OSH MPs were postponed due to their need to address the requirements of 10 CFR 850 and 851 per DOE directives – they are currently waiting for approval of their 850/851 Plans from DOE.</p> <p>EMS-SPDES Issues – Nitrate exceedances – focus on Plant Engineering; waiting for NYS DEC approval of sludge management/disposal plan. The current theory is that the exceedances are caused by sludge that remains in the system, but that they cannot yet remove because of a question of its radioactivity levels.</p> <p>E-Objectives – EMS Improvement, Compliance, Pollution Prevention, Communications, GW Protection, Enhance Natural & Cultural Resources Management Program, Environmental Clean-up</p> <p>Rev'd: Quarterly Report – 2nd Quarter FY07 (4/12/070</p>

Processes	Location/Observations
	<p>OSH – DART/TRCR - $\leq 0.25/\leq 0.65$ – currently over these targets. Encouraging through various means (training, communications strategies) behavioral modifications.</p> <p>OSH O/Ts include: Improve OSH MS, Conduct OSHA Extent of Condition Reviews, Improve Accident/Injury Rate Performance, Improve Implementation of Material Handling Training Program, Compliance, Communications, Student Safety, Travel (9 total).</p> <p>Part of the attempts to improve DART/TRCR – instituting more formalized work evaluation activity. Different solutions under discussion (attach JRAs to work orders for example).</p> <p>Around 20 S2 proposals submitted – waiting on funding. ESS&H Monthly Summary – includes updates on recordable/DART Cases, Traffic Safety</p> <p>See attached audit notes for additional evidence of conformance and interviewees.</p> <p>Interviewees: Deputy Director-Operations; Laboratory Director; Manager-SHSD; Manager-EWMSD; ALD-EHSQD</p>
<p>Management (E&O - 4.2, 4.3.3, 4.4.1, 4.4.3, 4.4.4, 4.5.1, 4.6; O-4.3.4, 4.5.2, 4.5.3; E-4.5.3, 4.5.4)</p>	<p>Identify process inputs and describe their interactions with the process: Noted in process description notes below.</p> <p>Process Objective(s): Ensure that the management systems are resourced adequately, that there is appropriate communications (internally and externally as appropriate) to ensure ongoing understanding and effective implementation of the requirements, and periodic reviews are completed to determine adequacy, suitability and effectiveness of the system.</p> <p>Describe whether the process is effective or not: Management activities and involvement with the two systems appears to be effective – there is a general indication and evidence of commitment from management, demonstrated through their participation in Lab communications and other events, as well as their involvement with the Institutional Level Management Reviews. Resources are provided, although there has been some difficulties with planning and allocation due to decreasing funding levels over the past several years from the DOE, while, in some respects, the requirements and obligations relative to EH&S has increased.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): <u>DD-Operations</u>: Operations Business Planning cycle is in process – creates a high level “to do” list.</p> <ul style="list-style-type: none"> • Includes lab level objectives/targets (OSH&E, in addition to business items) • Includes lab level management reviews • Working on process improvement initiatives such as clarifying the R2A2s of Assessment Managers, particularly when the requested assessment is of a cross-functional nature. • FY2007 Operations Business Plan (12/15/06) • ISM/Safety Improvement Project Plan (2006) – utilizing a dedicated project manager to run the overall set of projects • Several EH&S Initiatives – incorporates the E/OSH Objectives & Targets as well as enables them through flow-down to the directorates. Example: Reduction of Legacy Waste and Reduction of TRCR/DART rates • Rev'd: Performance Assessment records/results (3/27/07) – stop-light charts; working the issue of recycling building parts at end of life/demolition as one of the initiatives. • Annual Laboratory Plan (ALP; 11/15/06) • Review of the Plans and initiatives descriptions provides good evidence of coordination and flow-down of Lab objective/goals [Noteworthy]

Processes	Location/Observations
	<ul style="list-style-type: none"> • Operations Organization Integrated Assessment Report (FY06) – review of '06 objectives, successes, misses, etc.. Captures DD's review of all types of assessments done in Operations areas along w/ORPs review – ask for input from select staff as well. <p>Most recent Management Reviews for OSH & EMS (completed separately), December '06</p> <ul style="list-style-type: none"> • E-Issues – spills, GW cleanup, etc. • FY06 EMS Management Review Record of Decision (ROD; 3/7/07) – meeting held 12/18/06 • Minutes and RODs Institutional Level OSH MR (12/19/06) • Have begun a Human Performance improvement initiative as part of the overall improvement of OSH conditions at the Lab due to an upward spike in the DART and TRCR rates. • Recognition of Life or Habitual type safety issues, as opposed to organizational or operational issues. Resulting in part in revising Work Planning requirements. <p>See attached notes for additional evidence of conformance and interviewees.</p> <p>Interviewees: Deputy Director-Operations; Laboratory Director; Manager-SHSD; Manager-EWMSD; ALD-ESHQD, others</p>
<p>Internal Audit, Corrective/ Preventive Actions, Management Review – Lab Wide (E&O – 4.6; E – 4.5.5, 4.5.3, 4.5.4; O – 4.5.4, 4.5.3</p>	<p>Identify process inputs and describe their interactions with the process: Included on attached notes</p> <p>Process Objective(s): Ensure that the management systems are evaluated periodically for conformance to relevant requirements, actions are taken to effect improvements based on findings from audits or other actions, and that top management reviews the systems for effectiveness, adequacy and suitability.</p> <p>Describe whether the process is effective or not: The institutional level activities are very effective and the evidence reviewed demonstrates that improvements have been implemented as well. There is a clearer sense of the audit planning and implementation actions, based on very well documented evidence of these activities. Additionally, there appears to be better use of the ATS to record and track findings to closure. All of the information is appropriately provided to the Management Council during the Management Reviews, which also showed signs of improvement in the type of inputs and outputs that were included and derived from the meetings.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): Evidence of conformance and interviewees are included in the attached hand-written notes.</p>
<p>Environment, Safety, Health & Quality Directorate (EHSQD) 4.1, 4.2, 4.3, 4.4, 4.5, 4.6</p>	<p>Identify process inputs and describe their interactions with the process: ESHQD OSH Management System Program Description (OSH Manual; R1, 9/18/06, DH-SOP-007); Other inputs/documentation reviewed is identified in the attached notes.</p> <p>Process Objective(s): Providing support to all areas and Lab functions to ensure proper management of environmental, health and safety issues and compliance with relevant legal and other requirements.</p> <p>Describe whether the process is effective or not: The functions carried out by the EHSQD in relation to the E/OSH MS appear to work very effectively based on the evidence reviewed. There is a strong sense of commitment to ensuring the Lab remains compliant with all regulatory and DOE requirements – this was evident from all levels of the Directorate.</p>

Processes	Location/Observations
	<p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.):</p> <p>All evidence and interviewees are included in the attached hand-written notes.</p>
<p>Collider-Accelerator and Superconducting Magnet Department (CAD/SMD) 4.1, 4.2, 4.3, 4.4, 4.5, 4.6</p>	<p>Identify process inputs and describe their interactions with the process: Inputs and documentation is identified in the attached audit notes.</p> <p>Process Objective(s): Operation of the Collider-Accelerator and Superconducting Magnet areas in the most efficient and effective manners to ensure good research is carried out, and in conformance/compliance with all relevant requirements.</p> <p>Describe whether the process is effective or not: C-AD and SMD both have been applying the principles and practices of the EMS and OSHMS for a while. As a result, their systems are indicating a generally advanced level of maturity. There have been structural improvements to the E/OSH MS in this area in the form of using electronic documentation and control – this represents a substantial effort, as all documentation was previously management in hard-copy form. Other improvements were noted in the completion of the Management Reviews, where there was clearer evidence of the presentation and use of required and other inputs to the meetings, and their resultant outputs. Awareness and implementation of the operational control requirements appeared to be well understood within the areas by employees.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): All evidence and interviewees are included in the attached hand-written notes.</p>
<p>NASA Space Research Laboratory (NSRL) 4.1, 4.2, 4.3, 4.4, 4.5, 4.6</p>	<p>Identify process inputs and describe their interactions with the process: Inputs and documentation is identified in the attached audit notes.</p> <p>Process Objective(s): Ensure that planning and implementation relative to environmental aspects is completed so that research activities proceed with minimal impacts.</p> <p>Describe whether the process is effective or not: The work occurring at NSRL is so well-controlled that there are few, if any environmental aspects/ impacts and/or hazards/risks that may occur under normal operating conditions. In addition, the staff working the area appeared to have a very good understanding of their roles/responsibilities as it pertains to maintaining these controls effectively. Of note in the application of advanced technology to control the occupational hazards and risks at NSRL is the use of eye-scanning to identify users of the beam area, and the tight controls relative to training and users' abilities to use the beam and other areas of the lab.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): All evidence and interviewees are included in the attached hand-written notes.</p>
<p>Documentation, Document Control and Records 4.4.4, 4.4.5, 4.5.3 (O), 4.5.4 (E)</p>	<p>Identify process inputs and describe their interactions with the process: Subject areas for documentation and document control: Internal Controlled Documents (7/27/06), Records Management (9/01/02) – last major revision, Guidelines for Developing Procedures (7/27/06), Document Review Tracking Sheet and transmittal form are suggestions, not required(7/27/06).</p> <p>Occupational Safety and Health (OSH) Program Description (Pilot for OHSAS 18001).</p>

Processes	Location/Observations
	<p>Interim OHSAS 18001 Procedures are scheduled to be reviewed and merged with EMS procedures for SBMS by year end. Program description and management system description is under consideration to be merged in this revision.</p> <p>Several directorates have already merged or considered merging the OHSAS and EMS descriptions documents (ex. F&O and EENS). There have also been discussions about the redundancy of the directorate-level program descriptions and the lab level program descriptions.</p> <p>SBMS Subject Areas, local records requirements described in Directorate level program descriptions, actual records and interviews with individuals responsible for records.</p> <p>Process Objective(s): To describe the EMS and OHSAS systems, provide linkages with the systems and the process to control documents and records. Process to management records related to the EMS and OHSAS programs.</p> <p>Describe whether the process is effective or not: The process is effective and meets the requirements of ISO 14001 and OHSAS 18001. Documents reviewed during the audit were controlled using the rules and procedures outlined in the SBMS subject area and any local requirements for documentation.</p> <p>Examples of documents and records reviewed (see notes pages for details):</p> <p>Guidelines for preparing objectives and targets for EMS and OHSAS Subject Areas for documentation, records and emergency response Local emergency plans for groups in F&O, EENS, IS and IT JRA's and FRA's in F&O, EENS, IS and IT, Internal Audits and Oversight Objectives and Targets R2A2's Policy postings (auditing for current version posting) Vehicle inspection forms for the safeguards group Work orders for fire inspections and HVAC repairs Refrigerant Management Plan (Plant Engineering) Meeting minutes for safety and environmental communication with staff Forms for EPA Recovery of refrigerants Flash Report, monthly, April 30, 2007 (F&O metrics) Records Management Subject Area SBMS Management System Description, Nov. 15, 2004 (overall management system description for BNL)</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): EMS website provides access to all the documentation. Environmental Management System Description:</p> <p>ISO 14001 Plus EMS manual describes how the system addresses the ISO requirements.</p> <p>Documentation of the system Control of documents</p> <p>Steve Stein, subject matter area expert for internal controlled documents for EMS and OHSAS.</p> <p>Meeting record for causal analysis for document control issues identified in the registration</p>

Processes	Location/Observations
	<p>audits since FY01. 1/23/07 was example meeting from weekly meetings.</p> <p>Self assessment aid for internal controlled document. 90% of respondents indicated that they had sufficient document control procedures in place. Due May 4. Went to quality reps, EHSQ reps and Level 1, 2, 3 managers. Report in draft. Gauge awareness and status of implementation for the Subject Area requirements. End of year; plan a targeted assessment of progress.</p> <p>Includes questions about forms control, document revision frequency, operator aids, revision history, and web-based documentation requirements.</p> <p>Revision history for all of the interim documents was reviewed. The project to publish these to the SBMS subject area has been pushed out to the end of 2007.</p> <p>Records are managed and controlled at the lab-wide level using the SBMS subject area and the management system description fore records management.</p> <p>Subject area directs the identification, inventory via code identifiers which indicate the location of records at local levels, and storage and disposition of records and maintenance of electronic records.</p> <p>Records were audited in each directorate. See notes pages for evidence.</p>
<p>F&O Directorate</p> <p>Processes/Departments Audited included Staff Services, Plant Engineering, Safeguards and Security and Emergency Services Also Purchasing and Procurement</p> <p>4.2, 4.3, 4.4, 4.5, 4.6</p>	<p>Identify process inputs and describe their interactions with the process: Flash Report, monthly, April 30, 2007 See notes for specific inputs. Specific areas audited included: Heavy Equipment Repair Shop, Motor pool/Staff Services, Plant Engineering AC/Refrigerant repair, Safeguards and Security and Emergency Preparedness and Response.</p> <p>Process Objective(s): Process to maintain and improve facilities and support operations at BNL.</p> <p>Describe whether the process is effective or not: The process is effective overall. There is one minor nonconformance related to checking and corrective action. Please reference the findings section of the report for information.</p> <p>F&O “Programmatic” overview interviews. See below. Other departments and divisions within F&O are detailed in the hand-written notes or in the Emergency Preparedness and Response section of the report.</p> <p>Flash report monthly reports progress for objectives and measures for EHS. Includes status of DART, Total recordables, skill of the worker, worker observations (STOP).</p> <p>Worker Observation is in the red - a few organizations within F&O are not conforming to the requirement to perform STOP’s (EM and SC). This has been identified as an objective to improve compliance with this requirement.</p> <p>Sending email to supervisors weekly to remind them to perform STOP observations and increase safety talk awareness, etc. April5, 2007. March 8 – memo from F%O leadership when injuries started to increase. Developed website so that reports can be directly entered. Managers can access information about number of observations performed is available.</p> <p>-Monday morning memo’s include safety and environmental – every other Monday memo.</p>

Processes	Location/Observations
	<p>Long and full of little articles. Also includes a Q&A from employees – could be anonymous. Example November 6, 2006.</p> <p>Binder for EHS had evolved into a good tool for organization.</p> <p>Recycling program – discussed paper recycling and other recycling programs. Discussed the value of knowing the numbers of paper purchased – currently this is not tracked as a metric for the pollution prevention program.</p> <p>3 P2 awards from DOE. 2 from F&O (P2-Peter Pohlot) and 1 from Bob Lee. Discussion of the Animal Bedding P2 benefits and had many safety benefits.</p> <p>Recycling concrete aggregate from demo and using it for roads. Permit from DEC to refill a pit with concrete debris – looking at situation where the pit was filling up. Had the idea to mine the pit for concrete – saved \$789,000 and used concrete for new parking lots.</p> <p>Funding for Pollution Prevention awards (internal). Now funding is internal from directorates based on ROI.</p> <p>19 proposals get ranked by P2 council. Made up of two people from each directorate. Time frame for P2 program – milestones are provided for proposals. The target is to try to get funding for next year – or prepare a justification for why funding was not given.</p> <p>Discussion of DOJ Unicore program for electronics recycling. This was a program that was funded by P2 money and then inserted into this year’s funding plan.</p> <p>Compliance Assessment Process</p> <p>F&O subscribes to SBMS Requirements Management. All regulations are covered in the Subject Area. Operations are reviewed</p> <p>Safety and Health – if new or updated subject area is issued Nick reviews the requirement for each division within the directorate. He writes a report identifying new issues and audience.</p> <p>Training: Discussion of facility Inspection and Job Site Inspection – Tier 1 – Job Site Inspection and Facility Inspection, Schedule shows good coverage of all groups with the directorate. Groups with higher risks are inspected quarterly.</p> <p>Links of P2 – recycling and purchasing. Discussed tremendous results for recycling of various materials. Also discussed how purchasing of items is tracked. There is an opportunity to formalize the paper recycling programs by documenting them and focusing on reduced use. See findings section for details.</p> <p>Green purchasing, office supply, recycled toners (big implementation hurdles, but mature system now.</p> <p>Recycling report goes to purchasing department. Paper storage needs to be climate controlled; recycled paper content tested various brands before settling on HP recycled content. E-Mail – green products are default.</p> <p>P-Card program – audit of users for recycled products.</p> <p>Environmental targets – 100% in paper products, stationery plastics, oil.</p> <p>Participate in the programs on side – green day – bring them to green day and trade for reuse. Recycling of bottles and can.</p>

Processes	Location/Observations
	<p>Building 703 Cellar – storage for office furniture that one might acquire.</p> <p>Chemical Management System – Culture – moving toward a more conservation purchasing for chemicals – cost savings and cost avoidance.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): Bill Chaloupka, Plant Engineering, Water / Sewer Management; Peter Pohlot, Pollution Prevention; Rich DeRocher, Flash Reports, liaison for security division; Nick Houvener, Safety</p> <p>Solid Waste Recycling Stats FY1992 to 2007 EHS Coordinators meeting attendance sheet for April 25, 2007. 29 attendees from across the lab</p> <p>Industrial Hygiene Noise Level Monitoring and Evaluation for the Staff Services Motor Pool FY07 Objectives and Targets supporting ISO 14001 EMS, 11/13/06 (BNL guidelines for setting FY07 O7T at directorate level)</p> <p>F&O Directorate Program Description – combined EMS/OHSAS May 15, 2007</p> <p>F&O Tier 1 Inspection Schedule 2007. Most quarterly-lower risk areas inspected yearly. Detailed with building numbers and responsible supervisors.</p> <p>CA7752 F&O Action related to a change to JRA-EP-HEMO-01 Fuel Truck Loading and Dispensing.</p> <p>Injury investigations include record of whether a change to a JRA was required after critique.</p> <p>F&O FY07 Injury Investigation Log. Entries show evidence of changes resulting in CA11611.</p> <p>O&M Operating Instructions for the Maintenance Fuel Truck, O&M-HEMO-007, 8/11/05</p>
<p>Emergency Preparedness and Response 4.4.7, 4.4.6, 4.5.2 (O), 4.5.3, 4.5.4 (E), 4.3.1, 4.4.4, 4.4.5</p>	<p>Identify process inputs and describe their interactions with the process: SBMS Subject Area Emergency Preparedness, Effective Date May 15, 2003 SBMS Subject Area Spill Response, Effective Date Sept, 15, 2000 Run Cards on intranet and in binders at Firehouse Local Emergency Plans (sampling of buildings audited) Records of drills and emergency response situations Interviews with employees, building managers and emergency responders (fire and security)</p> <p>Process Objective(s): To effectively prepare and response to emergency situations including, medical, spills, fire and severe weather.</p> <p>Describe whether the process is effective or not: The process is effective and meets the requirements of ISO 14001 and OHSAS 18001.</p> <p>Detail of notes in this area is included in the hand-written notes section.</p> <p>The subject area describes the policies and procedures governing the preparedness for accident and emergency situations, including preparation of Run Cards which detail the potential hazards for each building to assist responders. Preparation of Local Emergency Plans, general requirements for emergency response, notification of next of kin in an emergency.</p> <p>Procedures are followed and up to date for all groups audited. There is an opportunity to improve the communication of critique record-keeping requirements to those individuals responsible. See findings section for details.</p> <p>151.1C DOE order generated three pages of MS Project of action items that are currently underway to improve emergency planning and response. There is an aggressive deadline for completing the actions.</p>

Processes	Location/Observations
	<p>Philosophy: Target drills to what is a realistic hazard in the building in accordance with the requirements of EMS/OHSAS for the activities to be appropriate to the activity.</p> <p>Annual Exercise – full participation with inside and outside folks. Report October 26, 2006, vendor Excalibur Associates assists with the planning and implementing the exercise.</p> <p>Emergency Drill 460 surprise fire drill for evacuation of employees. Drill conducted n April 13, 2007. Hand written notes. Lesson learned that new person had not had building orientation. Track it in the family ATS. Biotoxin Drill 10/17/06. Ten participants from LS, OMC, SHSD, EM, BIO, SE, DJ, BO, PE-OMC.</p> <p>Verified ES Captain’s Log for tracking issues and information exchange. Daily entries. Shelter-in-place assessments and drills conducted by building managers. Life Safety Code – NFPA 101 is referenced</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): See notes for evidence of specific interviews. Interviewees included police, police training captain, firearm inventory clerk, firefighters, fire safety engineer, acting fire chief, John Searing (emergency planning program coordinator).</p>
<p>EENS Directorate 4.2, 4.3, 4.4, 4.5, 4.6</p>	<p>Identify process inputs and describe their interactions with the process: Objectives and Targets for FY07, Revised JRA’s and work permits and ESR review and update. Local Emergency Plans and training programs.</p> <p>Process Objective(s): To effectively implement and maintain the EMS and OHSAS systems within the EENS directorate.</p> <p>Describe whether the process is effective or not: EMS and OHSAS are effectively implemented within the EENS Directorate.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): See handwritten notes for specific evidence of conformance.</p> <p>Status for EENS O&T FY07 – Excellent project management of progress tracking for O&T. Last update 5/1/07 EENS Work Permit for Lifting/Packing and unpacking boxes – RO-042407-01 EENS Safety Newsletter Special Pre-Audit Edition, Feb 2007 EENS Lifting presentation – PPT Training ESR’s for laboratory work JRA’s example Cryo EENS-JRA-004 was revised after a assessment for oxygen deficiency. Score reduced from 40 to 28. EENS-JRA-027 for the Neutron Generator revised on 3/16/07. New JRA. Field work is not performed off site – this may result in different hazards, therefore a new JRA was developed.</p> <p>Interviews with PI x3, Admin x2, EENS ops manager, EENS EHS Coordinator, EENS Lessons Learned Coordinator, Bldg. Manager.</p>
<p>Internal Audit and Oversight</p> <p>Diversity Office</p>	<p>Identify process inputs and describe their interactions with the process: Objectives and Targets for FY07, Revised JRA’s and work permits and ESR review and update. Local Emergency Plans and training programs.</p> <p>Process Objective(s): To effectively implement and maintain the EMS and OHSAS systems within the Internal</p>

Processes	Location/Observations
<p>Information Services Division</p> <p>Information Technology Division 4.2, 4.3, 4.4, 4.5, 4.6</p>	<p>Audit and Oversight Division, Diversity Office, Information Services Division, and Information Technology Division.</p> <p>Describe whether the process is effective or not: EMS and OHSAS are effectively implemented.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): See handwritten notes for specific evidence of conformance.</p> <p>Memo 2/12/07 regarding the critique of the false alarm for building 515. Took the opportunity to communicate the requirements for evacuation to all staff within the department</p> <p>Information Services performed a shelter in place and reviewed the full LEP and made changes to the plan (rev 5/2007). Changes were documented and included changing the responsibility for locking the windows and doors and making a redundant requirement for several people to bring the roster/routing slip for headcount. All employees were asked to review the plan and make comments via email.</p> <p>Interviews with Internal Audit and Oversight (2 people), Diversity Office (1), Information Services (2), Information Technology (6)</p>
<p>Competence, Training and Awareness 4.4.2, 4.5.3 (O), 4.5.4 (E), 4.4.3</p>	<p>Identify process inputs and describe their interactions with the process: Line Supervisors, Job Training Analysis, Brookhaven Training Management System (BTMS)</p> <p>Process Objective(s): The objective of this process is to assure that competency needed for jobs and specific tasks are identified and provided through training and or experience.</p> <p>Describe whether the process is effective or not: The process is effective. Each Directorate has a Training Coordinator to assist in training management. A job training analysis is completed for jobs and reviewed at least annually. Training needs are also analyzed through job risk analyses. Training is tracked with the BTMS. Individuals whose training is about to expire are notified 15, 5, and 3 days in advance. If training expires their supervisors are notified and they are not allowed to do related work until the training is completed. Verified later in the audit that there are strong operational controls to prevent work being conducted by non-trained personnel.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): Beth Schwaner, Training Manager Stephen Ferronex Fred Horn EM EP 117 Spill Training/Simulation for Stephen Ferronex completed (required every 30 months) Risk Job/Hazard Training Needs Assessment Tool Completion of Required Training for BNL Employees 5/1/07 Training Records ERP Staff: William Needrith (contractor) Waste Management - Confined Space Expired 8/26/06; Thomas Jernigan (contractor) several courses expired - fall protection expired 9/30/06; Thomas Doyle (full time) several expired courses - Hazwoper expired 2/16/06. Training Records Life Sciences Staff: Mario Moscariello, John Lara, Richard Suutkulis, all required training completed. Criteria for Determining Job Qualification Requirements BTMS See Gordon notes pages 2-3</p>

Processes	Location/Observations
<p>Life Sciences Directorate 4.2, 4.3.1, 4.3.3, 4.3.4(o), 4.4.1, 4.4.2, 4.4.3, 4.4.4, 4.4.5, 4.4.6, 4.4.7, 4.5.3/4.5.2, 4.5.4/4.5.3, 4.5.5/4.5.4, 4.6</p>	<p>Identify process inputs and describe their interactions with the process: SBMS, BNL Objectives and Targets</p> <p>Process Objective(s): The objective of the process is to operate the Directorate in conformance with applicable requirements of ISO 14001 and OHSAS 18000 and the requirements of DOE.</p> <p>Describe whether the process is effective or not: The process is effective. Job Risk Analyses are performed. Operational controls are in place and effective. Internal audits are managed and management review conducted in input to the Laboratory management review. People are aware of the management systems and their roles and responsibilities. Hazardous waste control was tracked through laboratory operations.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): Ann Emrick Training Coordinator, Stephen Ferrone EHS support, Bjorn Junker, Yorg Schuender, Thomas Langdon, Bob Colichio EHS support Leo Poloma, Lois Moller Bldg 860 Occurrence Report SC BHSO-BNL-2006-014 Open 8/24/06-9/29/06 Lessons Learned DJ-2007-1; MO-2005-1 Aspects List LS-EMSD Rev 1 10/06/2006 EHMS Management System Life Sciences OSHAS 18001 Rev1 10/06/2006 BNL Fire/Rescue Group #52482 1/13/05 WCF 8915 Non-radioactive waste control form submitted to Leo Poloma and Bldg 860 for processing and tracking. Waste in 90 day area are picked up after 60 days. Hazardous Waste Accumulation are Weekly Checklist all current from 1/19/07-5/14/07 See Gordon notes pages 4-7</p>
<p>Environmental Restoration Program (ERP) 4.2, 4.3.1, 4.3.3, 4.3.4 (o), 4.4.1, 4.4.2, 4.4.3, 4.4.5, 4.4.6, 4.4.7, 4.5.1, 4.5.3/4.5.2, 4.5.4/4.5.3, 4.5.5/4.5.4, 4.6</p>	<p>Identify process inputs and describe their interactions with the process: SBMS, BNL Objectives and Targets, Management Review</p> <p>Process Objective(s): The objective of the process is to conform to all requirements applicable to the Directorate.</p> <p>Describe whether the process is effective or not: The process is effective. The safety culture in this Directorate is very strong based on interviews throughout the organization. Strong operational controls are in place for work planning and to assure that people have adequate training for safety and environmental issues.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): Bruce Lein Training Coordinator Brian Heneveld OSH Rep Keith Klaus EMS & Env Compliance Joe Mantalto QC Les Hill, ALD Management Review Minutes 9/21/06 WI Access the Below Ground Ducts to Obtain Beryllium wipe sample SRC approved 5/14/07 ERP-JRA-S&M-021 5/3/07 Beryllium Sampling Plan 3/21/07 Daily Safety Meeting Form 5/16/07 HP-IHP 75505 5/16/07 ERP Corrective Action Program & Condition Reporting System ERP-07-03 ERP OPM-2.2 Rev 1 2/01/07 Condition Report ERP-07-33 Safety Observation ERP-OPM 4.7 Rev 0</p>

Processes	Location/Observations
	FY 2007 Objectives and Targets report 4/2/07 ER SIP 9/23/05; 9/29/06 Site Emergency Preparedness 5/15/03 See Gordon notes pages 7-9
Counter Intelligence Office 4.2, 4.3.3, 4.3.4 (o), 4.4.1, 4.4.2, 4.4.3, 4.4.6, 4.5.3/4.5.2	<p>Identify process inputs and describe their interactions with the process: SBMS, BNL Objectives and Targets, State Department Travel Notices</p> <p>Process Objective(s): The objective of this process is to provide safety awareness within this office and for people traveling on behalf of BNL.</p> <p>Describe whether the process is effective or not: Through the travel office. Risks are reported back to the travel office and communicated to the traveler. The process is effective. The CI office provides safety related services for travelers, assessing risk based on destination. Travel requests come in tr They also have a strong internal commitment in this five person office. The have already implemented safety improvements; e.g. handrail and door repair.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): Randy Bielgelman, Senior Counter Intelligence Officer; Helen Todowson, Analysis Linda Sinatra, Manager of Foreign Travel (Travel Office); Objectives and Targets 5/18/07 CI Office JRA Priority List Rev 1 9/19/06 H&S Records Management System 6/12/06 JRA 04 Business Travel to Underdeveloped Countries See Gordon notes Page 9</p>
Physics Department 4.2, 4.3.1, 4.3.3, 4.3.4 (o), 4.4.1, 4.4.2, 4.4.3, 4.4.6, 4.4.7, 4.5.4/4.5.3, 4.6	<p>Identify process inputs and describe their interactions with the process: SBMS, BNL Objectives and Targets, Mangement Reviews</p> <p>Process Objective(s): The objective of the process is to manage the Physics Department to conform to the requirements of the environmental health and safety management system while producing high quality research for its customers.</p> <p>Describe whether the process is effective or not: The process is effective. In addition to JRA development, the Department uses Experimental Safety Reviews for the safe control of experiments. Small amounts of waste are generated and properly handled.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): Ron Gill, EHS, Mike Zarcone, OHS, John Peters, Staff Support PO-LEP-01 Local Emergency Plan Rev 4.1 11/14/06 PO- 2007-001 Aspects reviewed 4/09/07 Experimental Safety Review Form 4.1 2006 PO-JRA-020-0.doc 10/29/04 PO-JRA 005.1 doc 90 day hazardous waste storage inspection sheets form 1/3/07-5/23/07 review See Gordon notes pages 10-11</p>
Instrumentation Division 4.2, 4.3.1, 4.3.3,	<p>Identify process inputs and describe their interactions with the process: SBMS, BNL Objectives and Targets, Management Review, BNL requirements</p> <p>Process Objective(s):</p>

Processes	Location/Observations
<p>4.3.4(o), 4.4.1, 4.4.2, 4.4.3, 4.4.5, 4.4.6, 4.4.7, 4.6</p>	<p>The objective of the process is to manage the Instrumentation Division operations to be in conformance with requirements of the EHS Management System requirements while providing detectors for the Laboratory and other customers.</p> <p>Describe whether the process is effective or not: The process is effective. Hazardous waste has been reduced significantly over the last six years. Activity Risk Analysis supplement the JRA to provide specific safety guidance.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): Robert DiNardo Dr. Veljko Radeka, Division Head Dr Graham Smith, Line Manager Gas and Liquid Detectors Management Review December 14, 06 ASR 08 Gas & Liquid Sensors ASR 13 90 Day Accumulation Area IO JRA 05 10/31/05 IO JRA 15 8/31/05 IO JRA 08 8/30/05 ESH Management System Rev 6 3/1/07 See Gordon notes pages 12-13</p>
<p>Finance Directorate 4.1, 4.2, 4.3.1, 4.3.3, 4.3.4(o), 4.4.1, 4.4.2, 4.4.3, 4.4.5, 4.4.6, 4.4.7</p>	<p>Identify process inputs and describe their interactions with the process: Budgets, SBMS, Objectives and Targets, Management Review, BNL Requirements</p> <p>Process Objective(s): The objective of the process is to manage the Finance Directorate to assure the its environmental and safety operations conform to management system requirements.</p> <p>Describe whether the process is effective or not: The process is effective. The finance department has no significant aspects and little health and safety risk beyond ergonomics. But their people are aware of the risks they have. The managed the move into the new building well.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): April Gray, OS Representative, Administrative Specialist Fred Benjamin, Accountant Barbara Juliano Contract Pay Charlotte Buck, Payroll Cynthia Von Gerichten, Richard Melucci, Budget Officer Maureen McDonnell Bldg Evacuation Drill Results 4/13/07 See Gordon notes pages 14-15</p>
<p>Human Resources/ Occupational Health and Safety 4.2, 4.3.1, 4.3.3, 4.3.4(o), 4.4.1, 4.4.2, 4.4.3, 4.4.5, 4.4.6, 4.4.7, 4.5.1(o), 4.5.2(o), 4.5.3(o)</p>	<p>Identify process inputs and describe their interactions with the process: SBMS, Injury Reports, BNL Requirements, Objectives and Targets</p> <p>Process Objective(s): The objective of the process is to provide quality administrative and health services for all BNL staff while maintaining an environmentally and occupationally safe environment.</p> <p>Describe whether the process is effective or not: The process is effective. Occupational Health Clinic is running proactive health care programs. They have targets and programs for reducing rehabilitation times. Those targets</p>

Processes	Location/Observations
	<p>will now become part of OHSAS. Environmental wastes have been reduce in Xray (developer, etc). Management has been very responsive to Safety Committee issues (Positive Practice).</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): Terry Maugeri, Senior Administrator, OS Rep Dr. Falco Donna Dowling, Labor Relations Louisa Barone Senior Human Resources Assistant (Chairs Safety Committee) Liz Gilbert, Safety Committee/Tier 1 Auditor Occupational Medicine Clinic FY 2007 Objectives and Targets OMC Self Assessment 1/24/07 MR 9/22/07 BOSH 4 Corrective Action HROM Safety meeting Minutes 4/30/2007 Quarterly Tier 1 Reports 12/11/06 & 4/2/07 Child Care not audited See Gordon pages 15-16</p>
<p>Intellectual Property, Sponsored Research, and Integrated Planning 4.2, 4.3.1, 4.3.3, 4.3.4(o), 4.4.1, 4.4.2, 4.4.3, 4.4.5, 4.4.6, 4.4.7, 4.5.1</p>	<p>Identify process inputs and describe their interactions with the process: Research Proposals, Patents, SBMS, BNL Requirements, FRAs, JRAs</p> <p>Process Objective(s): The objectives of the processes are managing interagency and other research and site wide integrated planning using environmentally and occupationally safe practices.</p> <p>Describe whether the process is effective or not: The process is effective. The processes are primarily administrative. ESH tools are used appropriately. Staff recently moved into Bldg 185 using safe practices learned from other facilities using Lessons Learned (good preventive action)/</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): Mike Fury, Sponsored Research Doug Ports, Integrated Planning Christine Brackel, Licensing Specialist Jinny Coccoreses, Administrative Specialist NF-07-16 Information Questionnaire (ESH questions for sponsored research proposals) NEPA Memo from Fury 4/10/07 NEPA Memo from Davis 4/15/07 O&Ts FY 2007 5/17/07 Relocation Plans & Safety Discussions 5/08/07 Work Space Inspection 5/21/07 (verification J Porter noticed flammable material in front of a spark source) JRA Office Work 10/31/06 Facility Use Agreement Bldg 185 FUA-185-2000-04-01 June 2007</p>
<p>Legal & Other, Compliance 4.3.2, 4.5.1, 4.5.2 Environmental, OH&S:</p>	<p>Identify process inputs and describe their interactions with the process: The legal and other requirements have been identified by subject matter: Safety, Health (SHSD) and Environmental. Each area has developed a very detailed list of requirements. Safety: Requirements Management, SE50700, 10/3/06 Industrial Hygiene: Requirements Management, IH50700, 04/20/07 Environmental: EMS from SBMS, pages 13-23, 5/21/07 During the audit, each manager interviewed provided records to demonstrate how changes or updates of the regulations are communicated. BNL utilizes a process called Record of Decision and effectively communicates changes and interpretation through this process. The safety and</p>

Processes	Location/Observations
	<p>health departments review their requirements on a quarterly basis as described by the SMEs and as defined in the procedures. The environmental department reviews the BNA updates twice per month. The site publishes an Annual Summary document for the public. This provides history and current data regarding projects taking place at BNL and informs interested parties executive summaries regarding the site's performance with respect to EH&S and special research studies.</p> <p>Process Objective(s): To ensure that BNL is informed of legal and other requirements for EH&S compliance.</p> <p>Describe whether the process is effective or not: All 3 areas demonstrated knowledge and expertise in the understanding of applicable legal and other requirements.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): See details from notes. Interviews were conducted with the S&H Division Managers and Directorate Head. Documentation reviewed included legal and other registers, the reference library (safety), permits (environmental), and inspection records.</p>
<p>CEGPA E/OHS: 4.3.1, 4.3.3, 4.3.4-O, 4.4.6, 4.5.1</p>	<p>Identify process inputs and describe their interactions with the process: Publications/Printing: Environmental Aspects included paint and alcohol; Safety Hazards included noise and ergonomics. Community Relations: Aspects are minimal; Safety hazards are building evacuation and public safety. Educational Programs: Student programs present a diverse set of hazards and risks. Those presented were traffic safety, recycling efforts and participation in the management systems as applicable.</p> <p>Process Objective(s): To facilitate internal and external communication for the laboratory. BNL has a very high profile both in the local community and with Department of Energy. They are very proactive in the media relations areas and community outreach and this was noted with the ribbon cutting ceremony on day 1 of the audit, for their new Nano-Technology building. Also, internal publications reviewed were very impressive.</p> <p>Describe whether the process is effective or not: The departments are working collaboratively to integrate their reporting programs and this was noted as a good practice. The Directorate places an important role for the laboratory and demonstrated their responsibilities effectively during this audit.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): See details from notes. The following departments were audited for this Directorate: Community Relations; Media, Communications & Production (printing), Educational Programs (Students programs). Representatives for each were available and very cooperative and informative.</p>
<p>BESD E/OHS: 4.3.1, 4.3.3, 4.3.4-O, 4.4.6, 4.5.1</p>	<p>Identify process inputs and describe their interactions with the process: A variety of techniques are used by this Directorate for planning and maintaining safe work practices and potential environmental hazards. This group focuses on ESRs which are reviewed annually. However, SAFs were developed along with JRA's as part of OHSAS implementation. There were several examples provided and found to be very detailed and included revisions based on lessons learned from other sites. This group has quarterly safety</p>

Processes	Location/Observations
	<p>committee meetings, and quarterly ES&H meetings. Objectives and targets are developed to include the PEMPs.</p> <p>Process Objective(s): The objectives for this Directorate are unique. In order to address the new CFN, they initiated a “Jump Start” program for future users. This was a very impressive method for planning. Potential risks and hazards were identified and addressed prior moving into the building.</p> <p>Describe whether the process is effective or not: The SME’s were effective in their presentation and interviews of their employees and student interns were exemplary.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): See details from notes. The following departments were audited from the Directorate: Chemistry Department: Interviews Physics Department: Interviews CFN Building- tour only</p>
<p>NSLS E/OHS: 4.3.1, 4.3.3, 4.3.4-O, 4.4.6, 4.5.1</p>	<p>Identify process inputs and describe their interactions with the process: There are 38 JRAs and 9FRAs for the Light Source group. Their primary significant aspects are waste, chemical storage, liquid discharge and air discharges. They currently have notable operational controls in place as demonstrated during this audit. Waste storage area is controlled by key access and inventory logs are maintained in the building. Signage was very effective. Training records were available as requested for a recent change in a work practice. The Tier 1 tracking spreadsheet maintained is very informative. Sorting by types of incidents, etc. was helpful during this audit, to confirm applicable corrective and preventive action measures are taken.</p> <p>Process Objective(s): This Directorate has a very informed and involved management group. The participation and openness was very helpful in ensuring that, with the 2000+ users of this building, the management takes EH&S planning very seriously and it is well documented. A tour was provided. During the tour, display of visual aids was noted as a noteworthy practice and waste storage areas were seen to be in neat and orderly manner.</p> <p>Describe whether the process is effective or not: This Directorate has demonstrated “noteworthy practices each year” and has been effective in the planning process for the CFN and the new Light Source programs coming on line currently and in the near future. Additionally, because of the volume of “users” of this program, the scrutiny of planning and communication is also to be noted as exemplary. Due to the Lab being down for maintenance, a full tour was provided. Also, a tour of the outside grounds found housekeeping to be in order. Also, a demonstration of the electronic Tier 1 tracking system was provided and found to be effectively utilized.</p> <p>The new light source personnel have approved their first EMS procedure and plan to have their EMS registration ready by 2008.</p> <p>Describe the Process (personnel interviewed, training, job relevance, policy, etc.): The following personnel were interviewed: 1-EH&S Management Rep. for the existing Light Source Program 2-appointed Manager for the new Light Source building which is currently under construction.</p>

READINESS REVIEW – N/A

Does the Company have any Proprietary Processes? If yes, please explain how these processes will be audited in the future.

Status of desk audit issues:

(The auditor shall document the status of issues identified during the Desk Audit Review. Any issue that was not closed during this visit should be written as a CAR.) NOTE - In the audit note section, please discuss what was reviewed during the ORR audit.

RE-ASSESSMENT ONLY:

Has the organization demonstrated an *effective interaction* between all requirements and/or the processes of the system?

☒ Yes* ☐ No If no, explain: *While there is evidence of effective interaction – it remains somewhat weakened by the ongoing struggles to create a truly lab-wide management system (E & OSH) that accounts for an appropriate level of autonomy among the directorates but provides an overarching and consistent set of requirements that are understood and effectively implemented by all members of the Lab. Continuing efforts to integrate the systems, “upgrade” the OSHMS documentation into the SBMS and other similar activities should help to overcome this current weakness.

(Lead Auditor should provide a brief summary – either narrative or bullets - of the objective evidence that supports a no answer above. Refer to audit notes and CARs where appropriate.)

In light of changes in operations and/or management system enhancements and improvements during the previous 3-year registration cycle, has the organization been able to maintain an overall effective Management System?

☒ Yes ☐ No If no, explain:

(Lead Auditor should provide a brief summary – either narrative or bullets - of the objective evidence that supports a negative answer above. Focus this section of the report on weaknesses of the system in the face of changes that have occurred in operations or the management system since the initial registration. Refer to audit notes, or CARs where appropriate.)

Has the organization’s top management demonstrated a commitment to maintain the effectiveness and improvement of the management system in order to enhance its overall performance?

☒ Yes ☐ No If no, explain:

(Lead Auditor should provide a brief summary – either narrative or bullets - of the objective evidence that supports a negative answer above. Refer to audit notes, and CARs where appropriate.)

Does the company's documented system continue to address the requirements of the audit standard?

☒ Yes ☐ No If no, explain:

(Lead auditor should provide a brief summary for a negative answer on whether the company's documentation addresses the requirements of the audit standard. The appropriate desk audit summary form should be completed and attached to this report.)

EMS AUDIT SUMMARY MATRIX FOR 3 YEAR REGISTRATION CYCLE

MAJOR PROCESSES	R	V1	V2	V3	V4	V5	Key	Clause	Description	R	V1	V2	V3	V4	V5
NSLS	X		X				-	4.2	Environmental Policy	X					
Collider-Accelerator Dept.	X		X				-	4.3	Planning						
Superconduct'g-Magnet Div.	X		X				-	4.3.1	Environmental Aspects	X		X			
EENS Directorate	X		X				-	4.3.2	Legal and Other Requirements	X		P			
Basic Energy Sciences	X		X				E	4.3.3	Objectives, Targets and Programs	X		X			
Life Sciences Dir.	X		X				-	4.4	Implementation/Operation						
Physics Department	X		X				-	4.4.1	Resources, Roles, Responsibility & Authority	X		P			
Instrumentation Division	X						-	4.4.2	Competence, Training & Awareness	X		X			
Counterintelligence Office	X						-	4.4.3	Communication	X		P			
NSLS	X							4.4.4	Documentation	X		X			
							-	4.4.5	Control of Documents	X		P			
							-	4.4.6	Operational Control	X		X			
							-	4.4.7	Emergency Preparedness & Response	X					
							-	4.5	Checking/Corrective Action						
							E	4.5.1	Monitoring and Measurement	X		P			
							A	4.5.2	Evaluation of Compliance	X					
SUPPORT PROCESSES							E	4.5.3	Nonconformity, Corrective and Preventive Action	1/0		X			
Facilities & Operations Dir.	X		X				-	4.5.4	Control of Records	X					
ESHQD	X		X				E	4.5.5	Internal Audit	X		X			
Env. Restoration Projects Dir	X		X				E	4.6	Management Review	X		X			
Management/Administration	X						-								
Int. Audit/Oversight Office	X						-								
Diversity Office	X						-								
Info. Tech/Info. Svcs. Div.	X														
Finance Directorate	X														
HR/Occupational Medicine	X														
Legal, OIP/Sponsored Res., IP Offices	X								CAR's ISSUED PER VISIT Minor/Major	1/0		2/0			

KEY (related to Standard Section only not Process Section): A=Annually; E=Every visit; (-) = Over 3 year cycle R= Registration or Reassessment; V#=Surv. Visits;

X = Processes and requirements audited this visit; P = partially audited. Leave blank if not audited. NA – not Applicable. CARs – (Minor/Major)

Any CAR written shall be identified in the requirement section of the form with the # of CAR (s) written for that specific requirement, i.e., 2 minors and 1 major for 7.6 would be written as 1/2 in section 7.6 of the form. No need to have X if a CAR is issued for a requirement. –

This is a cumulative form and is used for all audits in the 3 year cycle – YOU WILL NOT USE A NEW SHEET FOR EVERY AUDIT!

OHSAS 18001 AUDIT SUMMARY MATRIX FOR 3 YEAR REGISTRATION CYCLE

MAJOR PROCESSES	R	V1	V2	V3	V4	V5	Key	Clause	Description	R	V1	V2	V3	V4	V5
NSLS	X		X					4.1	General Requirements	X					
Collider-Accelerator Dept.	X		X				-	4.2	OH&S Policy	X					
Superconduct'g-Magnet Div.	X		X				-	4.3	Planning						
EENS Directorate	X		X				-	4.3.1	Planning for Hazard Identification, Risk Assessment and Risk Control	X		X			
Basic Energy Sciences	X		X				-	4.3.2	Legal and Other Requirements	X		P			
Life Sciences Dir.	X						E	4.3.3	Objectives	X		X			
Physics Department	X		X					4.3.4	OH&S Management Programs	X		X			
Instrumentation Division	X		X				-	4.4	Implementation/Operation						
Counterintelligence Office	X						-	4.4.1	Structure and Responsibility	X		P			
							-	4.4.2	Training, Awareness & Competence	X		X			
							-	4.4.3	Consultation & Communication	X		P			
								4.4.4	Documentation	X		X			
							-	4.4.5	Documents and Data Control	X		P			
							-	4.4.6	Operational Control	X		X			
SUPPORT PROCESSES							-	4.4.7	Emergency Preparedness & Response	X					
Facilities & Operations Dir.	X		X				E	4.5.1	Performance Measuring and Monitoring	X		P			
ESHQD	X		X				A	4.5.2	Accidents, Incidents, Non-conformances and Corrective and Preventive Actions	X		P			
Env. Restoration Projects Dir	X						-	4.5.3	Records and Records Management	X					
Management/Administration	X						E	4.5.4	Audit	X		X			
Int. Audit/Oversight Office	X						E	4.6	Management Review	X		X			
Diversity Office	X						-								
Info. Tech/Info. Svcs. Div.	X						-								
Finance Directorate	X														
HR/Occupational Medicine	X														
Legal, OIP/Sponsored Res., IP Offices	X								CAR's ISSUED PER VISIT Minor/Major	0		1/0			

KEY (related to Standard Section only not Process Section): A=Annually; E=Every visit; (-) = Over 3 year cycle R= Registration or Reassessment; V#=Surv. Visits;

X = Processes and requirements audited this visit; P = partially audited. Leave blank if not audited. NA – not Applicable. CARs – (Minor/Major)

Any CAR written shall be identified in the requirement section of the form with the # of CAR (s) written for that specific requirement, i.e., 2 minors and 1 major for 4.6 would be written as 2/1 in section 4.6 of the form. No need to have X if a CAR is issued for a requirement. –

This is a cumulative form and is used for all audits in the 3 year cycle – YOU WILL NOT USE A NEW SHEET FOR EVERY AUDIT!

Attachments to be filed with the Audit Report:

- ☒ Quote
- ☒ FRS signed by client
- ☐ Desk Audit Issues Summary Page (as necessary)

- ☒ Support for closure of CARs
- ☒ Audit Agenda/Schedule

Attachments

Audit Confirmation Letter and Schedule

Audit Evidence/Notes – Clayman, Sprague, Bellen, Henderlight



NSF International Strategic Registrations
Management Systems Registration

CONFIDENTIAL
Via E-Mail

19 April 2007

Ms. Pat Williams
Brookhaven National Laboratory
40 Brookhaven Avenue, Building 130
Upton, NY 11973-5000

Mr. John Selva
Brookhaven National Laboratory
Building 535Z Technology Street
P.O. Box 5000
Upton, NY 11973-5000

RE: EMS & OSHMS Reassessment Confirmation Letter and Schedule
Brookhaven National Laboratory – Upton, NY
FRS #69525 & 69528

Dear Ms. Williams and Mr. Selva:

This letter is to confirm that the OHSAS 18001:1999 and ISO 14001:2004 Reassessment of the Brookhaven National Laboratory (BNL) are scheduled to begin around 8:00 a.m. on Monday, May 21, 2007 and conclude during the afternoon of Friday, May 25, 2007. This audit will include our review of the BNL Environmental Management System (EMS) for its conformance to the ISO 14001:2004 standards, along with review of the Lab's Occupational Safety & Health Management System (OSHMS) for ongoing conformance to the OHSAS 18001:1999 requirements. The attached tentative audit schedule has been developed for these activities.

The NSF-ISR audit team will consist of me Ken Clayman, Lead Auditor, and Briana Sprague, Dawn Henderlight and Gordon Bellen as the Team Auditors. While on site, the audit team will need:

- Escorts who are familiar with the different facilities to accompany each auditor (need not be the same person during the entire audit).
- A conference room in which the opening and closing meeting can be conducted.
- A room in which the audit team can caucus periodically. A telephone and computer with access to the electronically based SBMS and E/OSH MS information in the room would be extremely helpful.

Please give me a call at (540) 220-5041 or contact at kaclayman@gmail.com, if you have any questions about these plans, or encounter any unexpected circumstances that could affect the schedule.

Sincerely yours,

NSF-ISR, Ltd.

Kenneth A. Clayman
Lead Auditor

Attachment

cc: Audit Team
BNL File

**Tentative E/OSH MS Reassessment Schedule**

Facility I.D. No. 69525 & 69528 – Brookhaven Nat'l. Lab	Date(s): 21-25 May 2007
Auditor: Ken Clayman (Lead)	Auditor: Briana Sprague

Day 1 – 21 May 2007

TIME	LOCATION/DEPT/FUNCTION *	TIME	LOCATION/DEPT/FUNCTION *
0800	Auditors Arrive – Security/Badging, etc.	0800	Auditors Arrive – Security/Badging, etc.
0845	Opening Meeting	0845	Opening Meeting
0915	Review of FRS', Changes to Organization, Use of NSF Mark	0915	Programmatic Reviews – Scope of Systems, Documentation, Document Control, Records Management
1000	Management Commitment/Involvement – Interviews with Lab Director, Management Representatives and Leadership Team Members (separately)		
1215	Lunch	1215	Lunch
1300	Audit Team Caucus	1300	Audit Team Caucus
1315	Continue Interviews with Lab Leadership	1315	Lab-wide Emergency Planning & Response (Cover F&O-Emergency Services and Safeguards & Security Divisions at the same time)
1515	Lab-wide Objectives/Targets/Management Programs (E&OSH)		
1645	Audit Team Caucus	1645	Audit Team Caucus
1715	Daily Debrief	1715	Daily Debrief
1745	Audit Team Departs	1745	Audit Team Departs

Note: During auditing in specified divisional areas, Auditors will be evaluating the extent of the E/OSH MS implementation and the effective implementation of the system in these functional locations. This will include assessment for conformance to requirements found in Clauses 4.2, 4.3, 4.4, 4.5 and 4.6 of both Standards as applicable.

* Review of findings from previous audit visits will occur during the appropriate period when those subjects are under review/discussion and in the Directorates/Divisions/Departments where they were identified.



Tentative E/OSH MS Reassessment Schedule

Facility I.D. No. 69525 & 69528 – Brookhaven Nat'l. Lab	Date(s): 21-25 May 2007
Auditor: Dawn Henderlight	Auditor: Gordon Bellen

Day 1 – 21 May 2007

TIME	LOCATION/DEPT/FUNCTION *	TIME	LOCATION/DEPT/FUNCTION *
0800	Auditors Arrive – Security/Badging, etc.	0800	Auditors Arrive – Security/Badging, etc.
0845	Opening Meeting	0845	Opening Meeting
0915	Lab Overview Presentation and Tour – Includes review of ESSH Policy, Environmental Aspects/Impacts, H&S Hazards/Risks, Establishment of Objectives/Targets, Management Systems R2A2s	0915	Lab Overview Presentation and Tour – Includes review of ESSH Policy, Environmental Aspects/Impacts, H&S Hazards/Risks, Establishment of Objectives/Targets, Management Systems R2A2s
1215	Lunch	1215	Lunch
1300	Audit Team Caucus	1300	Audit Team Caucus
1315	Complete morning activities	1315	Complete morning activities
1415	Legal/Other Requirements, Compliance Evaluation/Monitoring	1415	Competence, Training & Awareness; External Communications
1645	Audit Team Caucus	1645	Audit Team Caucus
1715	Daily Debrief	1715	Daily Debrief
1745	Auditors Depart	1745	Auditors Depart

Note: During auditing in specified divisional areas, Auditors will be evaluating the extent of the E/OSH MS implementation and the effective implementation of the system in these functional locations. This will include assessment for conformance to requirements found in Clauses 4.2, 4.3, 4.4, 4.5 and 4.6 of both Standards as applicable.

* Review of findings from previous audit visits will occur during the appropriate period when those subjects are under review/discussion and in the Directorates/Divisions/Departments where they were identified.



Tentative E/OSH MS Reassessment Schedule

Facility I.D. No. 69525 & 69528 – Brookhaven Nat'l. Lab	Date(s): 21-25 May 2007
Auditor: Ken Clayman (Lead)	Auditor: Briana Sprague

Day 2 – 22 May 2007

TIME	LOCATION/DEPT/FUNCTION *	TIME	LOCATION/DEPT/FUNCTION *
0815	Auditors Arrive	0815	Auditors Arrive
0830	Continue/complete audit activities from Day 1	0830	Continue/Complete ESD/SSD – Add remainder of F&O Directorate (including Procurement & Property Management Division (PPMD))
0930	Internal Audit, Corrective/Preventive Action, Management Review – Lab Wide		
1200	Lunch	1200	Lunch
1245	Audit Team Caucus	1245	Audit Team Caucus
1300	Prepare for/audit Collider-Accelerator Department (C-AD)/ Superconducting Magnet Division (SMD)	1300	Continue F&O
1615	Audit Team Caucus	1615	Audit Team Caucus
1645	Daily Debrief	1645	Daily Debrief
1715	Auditors Depart	1715	Auditors Depart

Note: During auditing in specified divisional areas, Auditors will be evaluating the extent of the E/OSH MS implementation and the effective implementation of the system in these functional locations. This will include assessment for conformance to requirements found in Clauses 4.2, 4.3, 4.4, 4.5 and 4.6 of both Standards as applicable.

* Review of findings from previous audit visits will occur during the appropriate period when those subjects are under review/discussion and in the Directorates/Divisions/Departments where they were identified.



Tentative E/OSH MS Reassessment Schedule

Facility I.D. No. 69525 & 69528 – Brookhaven Nat'l. Lab	Date(s): 21-25 May 2007
Auditor: Dawn Henderlight	Auditor: Gordon Bellen

Day 2 – 22 May 2007

TIME	LOCATION/DEPT/FUNCTION *	TIME	LOCATION/DEPT/FUNCTION *
0815	Auditors Arrive	0815	Auditors Arrive
0830	Prepare for/Audit Community Education, Government & Public Affairs (CEGPA) Directorate	0830	Prepare for/Audit Life Sciences Directorate
1200	Lunch	1200	Lunch
1245	Audit Team Caucus	1245	Audit Team Caucus
1300	Continue/Complete CEGPA	1300	Complete Life Sciences Directorate
		1400	Prepare for/Audit Environmental Restoration Projects (ERP), Counterintelligence Office (CO)
1615	Audit Team Caucus	1615	Audit Team Caucus
1645	Daily Debrief	1645	Daily Debrief
1715	Auditors Depart	1715	Auditors Depart

Note: During auditing in specified divisional areas, Auditors will be evaluating the extent of the E/OSH MS implementation and the effective implementation of the system in these functional locations. This will include assessment for conformance to requirements found in Clauses 4.2, 4.3, 4.4, 4.5 and 4.6 of both Standards as applicable.

* Review of findings from previous audit visits will occur during the appropriate period when those subjects are under review/discussion and in the Directorates/Divisions/Departments where they were identified.



Tentative E/OSH MS Reassessment Schedule

Facility I.D. No. 69525 & 69528 – Brookhaven Nat'l. Lab	Date(s): 21-25 May 2007
Auditor: Ken Clayman (Lead)	Auditor: Briana Sprague

Day 3 – 23 May 2007

TIME	LOCATION/DEPT/FUNCTION *	TIME	LOCATION/DEPT/FUNCTION *
0815	Auditors Arrive	0815	Auditors Arrive
0830	Continue C-AD/SMD	0830	Complete F&O
		1100	Prepare for/Audit Energy, Environment & National Security (EENS) Directorate
1200	Lunch	1200	Lunch
1245	Audit Team Caucus	1245	Audit Team Caucus
1300	Complete C-AD/SMD	1300	Continue EENS
1430	Prepare for/Audit Environmental, Safety, Health & Quality (ESHQ) Directorate		
1615	Audit Team Caucus	1615	Audit Team Caucus
1645	Daily Debrief	1645	Daily Debrief
1715	Auditors Depart	1715	Auditors Depart

Note: During auditing in specified divisional areas, Auditors will be evaluating the extent of the E/OSH MS implementation and the effective implementation of the system in these functional locations. This will include assessment for conformance to requirements found in Clauses 4.2, 4.3, 4.4, 4.5 and 4.6 of both Standards as applicable.

* Review of findings from previous audit visits will occur during the appropriate period when those subjects are under review/discussion and in the Directorates/Divisions/Departments where they were identified.



Tentative E/OSH MS Reassessment Schedule

Facility I.D. No. 69525 & 69528 – Brookhaven Nat'l. Lab	Date(s): 21-25 May 2007
Auditor: Dawn Henderlight	Auditor: Gordon Bellen

Day 3 – 23 May 2007

TIME	LOCATION/DEPT/FUNCTION *	TIME	LOCATION/DEPT/FUNCTION *
0815	Auditors Arrive	0815	Auditors Arrive
0830	Prepare for/Audit Basic Energy Sciences Directorate (BESD)	0830	Complete ERP/CO
		1015	Prepare for/audit Physics Department and Instrumentation Division
1200	Lunch	1200	Lunch
1245	Audit Team Caucus	1245	Audit Team Caucus
1300	Continue/Complete BESD	1300	Continue/Complete Physics, Instrumentation
1615	Audit Team Caucus	1615	Audit Team Caucus
1645	Daily Debrief	1645	Daily Debrief
1715	Auditors Depart	1715	Auditors Depart

Note: During auditing in specified divisional areas, Auditors will be evaluating the extent of the E/OSH MS implementation and the effective implementation of the system in these functional locations. This will include assessment for conformance to requirements found in Clauses 4.2, 4.3, 4.4, 4.5 and 4.6 of both Standards as applicable.

* Review of findings from previous audit visits will occur during the appropriate period when those subjects are under review/discussion and in the Directorates/Divisions/Departments where they were identified.



Tentative E/OSH MS Reassessment Schedule

Facility I.D. No. 69525 & 69528 – Brookhaven Nat'l. Lab	Date(s): 21-25 May 2007
Auditor: Ken Clayman (Lead)	Auditor: Briana Sprague

Day 4 – 24 May 2007

TIME	LOCATION/DEPT/FUNCTION *	TIME	LOCATION/DEPT/FUNCTION *
0815	Auditors Arrive	0815	Auditors Arrive
0830	Continue ESHQD	0830	Complete EENS
		1000	Prepare for/audit Internal Audit & Oversight Office, Diversity Office
1200	Lunch	1200	Lunch
1245	Audit Team Caucus	1245	Audit Team Caucus
1300	Complete ESHQD	1300	Prepare for/audit Information Technology and Information Services Divisions (including Computational Science Center)
1615	Audit Team Caucus	1615	Audit Team Caucus
1645	Daily Debriefing	1645	Daily Debriefing
1715	Auditors Depart	1715	Auditors Depart

Note: During auditing in specified divisional areas, Auditors will be evaluating the extent of the E/OSH MS implementation and the effective implementation of the system in these functional locations. This will include assessment for conformance to requirements found in Clauses 4.2, 4.3, 4.4, 4.5 and 4.6 of both Standards as applicable.

* Review of findings from previous audit visits will occur during the appropriate period when those subjects are under review/discussion and in the Directorates/Divisions/Departments where they were identified.



Tentative E/OSH MS Reassessment Schedule

Facility I.D. No. 69525 & 69528 – Brookhaven Nat'l. Lab	Date(s): 21-25 May 2007
Auditor: Dawn Henderlight	Auditor: Gordon Bellen

Day 4 – 24 May 2007

TIME	LOCATION/DEPT/FUNCTION *	TIME	LOCATION/DEPT/FUNCTION *
0815	Auditors Arrive	0815	Auditors Arrive
0830	Prepare for/audit National Synchrotron Light Source (NSLS) Department/Light Sources Directorate	0830	Prepare for/audit Finance Directorate
1200	Lunch	1200	Lunch
1245	Audit Team Caucus	1245	Audit Team Caucus
1300	Continue/Complete NSLS	1300	Continue/Complete Finance Directorate
		1430	Prepare for/audit Human Resources & Occupational Medicine Division, and Integrated Planning Office
1615	Audit Team Caucus	1615	Audit Team Caucus
1645	Daily Debriefing	1645	Daily Debriefing
1715	Auditors Depart	1715	Auditors Depart

Note: During auditing in specified divisional areas, Auditors will be evaluating the extent of the E/OSH MS implementation and the effective implementation of the system in these functional locations. This will include assessment for conformance to requirements found in Clauses 4.2, 4.3, 4.4, 4.5 and 4.6 of both Standards as applicable.

* Review of findings from previous audit visits will occur during the appropriate period when those subjects are under review/discussion and in the Directorates/Divisions/Departments where they were identified.



Tentative E/OSH MS Reassessment Schedule

Facility I.D. No. 69525 & 69528 – Brookhaven Nat'l. Lab	Date(s): 21-25 May 2007
Auditor: Ken Clayman (Lead)	Auditor: Briana Sprague

Day 5 – 25 May 2007

TIME	LOCATION/DEPT/FUNCTION *	TIME	LOCATION/DEPT/FUNCTION *
0815	Auditors Arrive	0815	Auditors Arrive
0830	Audit Trail Follow-up/Completion of Evidence Collection	0830	Audit Trail Follow-up/Completion of Evidence Collection
1145	Lunch	1145	Lunch
1245	Audit Team – Report Preparation	1245	Audit Team – Report Preparation
1515	Closing Meeting	1515	Closing Meeting
1545	Audit Team Departs	1545	Audit Team Departs

Note: During auditing in specified divisional areas, Auditors will be evaluating the extent of the E/OSH MS implementation and the effective implementation of the system in these functional locations. This will include assessment for conformance to requirements found in Clauses 4.2, 4.3, 4.4, 4.5 and 4.6 of both Standards as applicable.

* Review of findings from previous audit visits will occur during the appropriate period when those subjects are under review/discussion and in the Directorates/Divisions/Departments where they were identified.



Tentative E/OSH MS Reassessment Schedule

Facility I.D. No. 69525 & 69528 – Brookhaven Nat'l. Lab	Date(s): 21-25 May 2007
Auditor: Dawn Henderlight	Auditor: Gordon Bellen

Day 5 – 25 May 2007

TIME	LOCATION/DEPT/FUNCTION *	TIME	LOCATION/DEPT/FUNCTION *
0815	Auditors Arrive	0815	Auditors Arrive
0830	Prepare for/audit Office of Intellectual Property & Sponsored Research	0830	Prepare for/audit Legal Office
		1000	Audit Trail Follow-up/Completion of Evidence Collection
1030	Audit Trail Follow-up/Completion of Evidence Collection		
1145	Lunch	1145	Lunch
1245	Audit Team – Report Preparation	1245	Audit Team – Report Preparation
1515	Closing Meeting	1515	Closing Meeting
1545	Audit Team Departs	1545	Audit Team Departs

Note: During auditing in specified divisional areas, Auditors will be evaluating the extent of the E/OSH MS implementation and the effective implementation of the system in these functional locations. This will include assessment for conformance to requirements found in Clauses 4.2, 4.3, 4.4, 4.5 and 4.6 of both Standards as applicable.

* Review of findings from previous audit visits will occur during the appropriate period when those subjects are under review/discussion and in the Directorates/Divisions/Departments where they were identified.

Facility Record Sheet

NSF International Strategic Registrations, LTD

789 N. Dixboro Road
Ann Arbor, MI 48105
Tel: (734) 827-6800



Corporate Name Brookhaven National Laboratory

Corporate 69520

Address 1 Building 460 Brookhaven Avenue
Address 2 P.O. Box 5000
Address 3
Address 4
City Upton **State** New York **Postal** 11973-5000 **Country** US
Toll Free **Ext** **Fax**
EMS Rep **Phone** **Ext**
QMS Rep **Phone** **Ext**
HACCP Rep **Phone** **Ext**

Facility Name Brookhaven National Laboratory

FRS 69525

Address 1 Building 860
Address 2 ~~P.O. Box 5000~~ E. 5th Street
Address 3
Address 4
City Upton L.I. **State** New York **Postal Code** 11973-5000 **Country** US
Contact George Goode
Contact E-Mail goode@bnl.gov **Toll Free** **Ext**
Contact Phone (631) 344-4549 **Ext**
Contact Fax (631) 344-5842 3223 **Regional Sales Manager** Cindy Neve
Backup Contact John Selva **Registration Specialist** Karen Laskowski (734-827-6843)

Facility Shipping Address

☐ Check here if same as Facility Address

Facility Name Brookhaven National Laboratory
Facility Contact Mr. George Goode
Address 1 Building 860
Address 2 ~~P.O. Box 5000~~ E. 5th Street
Address 3
Address 4
City Upton L.I. **State** New York **Postal** 11973-5000 **Country** US

Facility Billing Address

☐ Check here if same as Facility Address

Facility Name Brookhaven National Laboratory
Facility Contact Carol Ogeka
Address 1 ESHQ Directorate
Address 2 Bldg 120
Address 3
Address 4
City Upton **State** New York **Postal** 11973 **Country** US

Program Status* Listed

FRS 69525

*If the status is Audit Only then the company does not have its own scope or certificate but is referenced on another certificate.

Scope of Registration

Facilities, experiments, and operations managed by Brookhaven Science Associates at Brookhaven National Laboratory in accordance with the Environmental Management System.

Exclusions Product Design**Accreditation Marks** ANAB-EMS**Audit Frequency** 12 Month(s)**Lead Auditor** Kenneth A. Clayman**Auditor Cert #****Auditor Cert Date****Auditor Renew By****CB Member** Chris J. Reimer**Certificate Number** 69525-E3**Certificate Issue Date** 08/10/2005**Company Initial Date** 07/10/2001**Registration Date** 06/25/2004**Expiration Date** 06/24/2007**Industry Cert Number**

Fields in box cannot be updated by FRS report. To update your qualifications contact Gail Sheats. To request a CB Member change contact Garry Puglio

Support Sites

(Only required for QMS)

Scopes

(Support site scopes should only be changed if you are the lead auditor for that site)

Customer Specifics (For Industry Specific Standards Only. Please provide customer name and customer specific document referenced)*****Note to Auditors: Please schedule, or indicate tentative dates, for the next three audits to occur*****

<u>Audit</u>	<u>Planned Date</u>	<u>Actual Date</u>	<u>Report Date</u>	<u>Audit Team</u>
Surveillance Audit	06/20/2005	06/20/2005	06/23/2005	Lead - Kenneth A. Clayman
Surveillance Audit	06/19/2006	06/19/2006	06/23/2006	Lead - Kenneth A. Clayman, Briana Sprague
Re-assessment Audit	06/01/2007	5/21/07	5/25/07	Lead - Kenneth A. Clayman B. Sprague, D. Henderlight, G. Bellen

The reassessment audit conducted May 2007 included all areas of the Lab, which is the combination of the Phase 1, 2 & 3 OHSAS scopes in addition to the EMS Scope - this will bring the EMS and OSHMS surveillance and reassessment schedules into alignment. If necessary adjust the associated Quotes for surveillance visit man-days.

Industrial Classification

<u>Industrial</u>	<u>Code</u>	<u>Description</u>
SIC	8733	Noncommercial research organizations
IAF - EMS	34	Engineering Services

Supplier Information

Supplier Codes (Do not indicate a supplier without a valid code)

Ford N/A
GM N/A
Daimler Chrysler N/A
Other
Corp Classification None

General Information

P.O. Number BNL 0000092305
Quality Manual Date
Manual Revision
Contract on File 07/19/1999
Language eng

Site Information

Operating Hours
Holidays / Closings Standard
Directions to Facility
Est Size of Facility (Square Feet) 0
Number of Employees - Hourly 0
Number of Employees - Salaried ~~2,750~~ 2,570
Total Number of Employees at each shift-Shift1 ~~2,750~~ 2,570
Total Number of Employees at each shift-Shift2 0
Total Number of Employees at each shift-Shift3 0
Total Number of Employees at each shift-Shift4 0

☒ Check when Number of Employees has been verified

Facility Name Brookhaven National Laboratory

FRS: 69525

The following CAR's were opened for this facility on the date indicated, but have not been closed as of the above print date.
CARS CANNOT be closed without submitting the proper CAR form and evidence of closure.
OFI's CAN be closed simply by making a notation on this page to the Registration Specialist.

BNL-EMS-SA06/23/2005	Minor	4.4.6	Open
BNL-EMS-SA06/23/2005	Minor	4.4.5	Open
BNL-EMS-SA06/20/2005	Minor	4.3.2	Open

All three were closed during the 2006 surveillance!

Audit Conducted in Remote Auditor		Auditor Recommendation		Certification Board Approval	
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Signature	Date	Signature	Date
Desk Audit Readiness Review	Recommendation to proceed				
	Recommendation NOT to proceed				
Registration	Recommendation for Registration				
	Recommendation for Registration Pending other Corporate Sites				
	Recommendation for Registration pending CARs				
	Recommendation for a Verification audit				
Upgrade to: You must make a recommendation under Registration in addition to indicating the upgrade standard.	ISO 14001:2004 ISO/TS 16949:2002 ISO 9001:2000 AS9100:2004 Other _____				
Reassessment	Recommendation for Recertification	<i>Carroll H. Clayton</i>	5/25/07		
	Recommendation for Recertification Pending Other Corporate Sites				
	Recommendation for Recertification pending CARs				
	Recommendation for a Verification audit				
Surveillance	No Change to Certificate	<i>Carroll H. Clayton</i>	5/25/07		
	Certificate Changes Required				
Special ** (Requires additional authorization)	Recommendation for Probation	Approval			
	Recommend Probation Removal	Approval			
	Recommendation to Drop _____	Approval			
	Registration	Approval			

[Signature]
Client Management Rep or Authorized Signature

5/25/07
Date

☐ Checked for Signed Contract on file

FOR OFFICE USE ONLY

External Databases Updated: ☐ IATF/IAOB (TS) ☐ OASIS (AS) ☐ QSU (QS)

Reason for Certificate Issue: ☐ New Registration ☐ Upgrade ☐ Reassessment ☐ Transfer

☐ Administrative Error ☐ Name Change ☐ Surveillance (Reason)

Certificate Review: ☐ Company Name/Address ☐ Registration Date ☐ Support Sites/Scopes

☐ IAF/SIC/NACE ☐ Marks ☐ Expiration Date ☐ Customer Specifics

☐ Scope ☐ Cert # ☐ Initial Date ☐ Supplier Codes

Initial Approval

Facility Record Sheet

NSF International Strategic Registrations, LTD

789 N. Dixboro Road
Ann Arbor, MI 48105
Tel: (734) 827-6800



Corporate Name Brookhaven National Laboratory

Corporate 69520

Address 1 Building 460 Brookhaven Avenue
Address 2 P.O. Box 5000
Address 3
Address 4
City Upton **State** New York **Postal** 11973-5000 **Country** US
Toll Free **Ext** **Fax**
EMS Rep **Phone** **Ext**
QMS Rep **Phone** **Ext**
HACCP Rep **Phone** **Ext**

Facility Name Brookhaven National Laboratory

FRS 69528

Address 1 81 Cornell Ave.
Address 2
Address 3
Address 4
City Upton **State** New York **Postal Code** 11973-5000 **Country** US
Contact Patricia Williams
Contact E-Mail pat5@bnl.gov **Toll Free** **Ext**
Contact Phone 631-344-8211 **Ext**
Contact Fax 631-344-7618 **Regional Sales Manager** Cindy Neve
Backup Contact Robert Selvey **Registration Specialist** Karen Laskowski (734-827-6843)

Facility Shipping Address

☐ Check here if same as Facility Address

Facility Name Brookhaven National Laboratory
Facility Contact Patricia Williams
Address 1 81 Cornell Ave.
Address 2
Address 3
Address 4
City Upton **State** New York **Postal** 11973-5000 **Country** US

Facility Billing Address

☐ Check here if same as Facility Address

Facility Name Brookhaven National Laboratory
Facility Contact Carol Ogeka
Address 1 ESHQ Directorate
Address 2 Bldg 120
Address 3
Address 4
City Upton **State** New York **Postal** 11973 **Country** US

Program Status* Listed

FRS 69528

*If the status is Audit Only then the company does not have its own scope or certificate but is referenced on another certificate.

Scope of Registration

Health, safety risks associated with Brookhaven National Laboratory operations in Upton, New York.

Exclusions Product Design**Accreditation Marks** None**Audit Frequency** 12 Month(s)**Lead Auditor** Kenneth A. Clayman**Auditor Cert #****Auditor Cert Date** 04/30/2004**Auditor Renew By****CB Member** Chris J. Reimer**Certificate Number** 69528-OH2**Certificate Issue Date** 12/19/2006**Company Initial Date** 12/02/2005**Registration Date** 12/02/2005**Expiration Date** 12/01/2008**Industry Cert Number**

Fields in box cannot be updated by FRS report. To update your qualifications contact Gail Sheats. To request a CB Member change contact Garry Puglio

Support Sites

(Only required for QMS)

Scopes

(Support site scopes should only be changed if you are the lead auditor for that site)

Customer Specifics (For Industry Specific Standards Only. Please provide customer name and customer specific document referenced)*****Note to Auditors: Please schedule, or indicate tentative dates, for the next three audits to occur*****

<u>Audit</u>	<u>Planned Date</u>	<u>Actual Date</u>	<u>Report Date</u>	<u>Audit Team</u>
Desk Audit	07/15/2005	07/28/2005	07/28/2005	Lead - Kenneth A. Clayman
Readiness Review	09/19/2005	09/19/2005	09/20/2005	Lead - Kenneth A. Clayman
Registration Audit	11/14/2005	11/14/2005	11/14/2005	Lead - Kenneth A. Clayman, Briana Sprague
Surveillance Audit	06/19/2006	06/19/2006	06/23/2006	Lead - Kenneth A. Clayman, Briana Sprague
Desk Audit	06/30/2006	09/05/2006	09/05/2006	Lead - Kenneth A. Clayman
Readiness Review	09/30/2006	10/12/2006	10/13/2006	Lead - Briana Sprague
Registration Audit	12/03/2006	12/04/2006	12/07/2006	Lead - Kenneth A. Clayman, Briana Sprague
Reassessment				
Surveillance Audit	05/21/2007	5/21/07	5/25/07	Lead - Kenneth A. Clayman, B. Sprague,
Surveillance Audit	12/04/2007			Lead - Kenneth A. Clayman, D. Henderlight,
	6/16/08			G. Bellen

The reassessment audit conducted May 2007 included all areas of the Lab, which is the combination of the Phase 1, 2 & 3 OHSAS scopes in addition to the EMS Scope - this will bring the EMS and OSHMS surveillance and reassessment schedules into alignment. If necessary adjust the associated Quotes for surveillance visit man-days.

Industrial Classification

<u>Industrial</u>	<u>Code</u>	<u>Description</u>
SIC	87	Engineering & Management Services
IAF - EMS	34	Engineering Services

Supplier Information

Supplier Codes (Do not indicate a supplier without a valid code)

Ford N/A
GM N/A
Daimler Chrysler N/A
Other
Corp Classification None

General Information

P.O. Number PO 106339
Quality Manual Date
Manual Revision
Contract on File 07/19/1999
Language eng

Site Information

Operating Hours (Not provided)
Holidays / Closings Standard
Directions to Facility
Est Size of Facility (Square Feet)
Number of Employees - Hourly ~~860~~
Number of Employees - Salaried 0 2,570
Total Number of Employees at each shift-Shift1 ~~860~~ 2,570
Total Number of Employees at each shift-Shift2
Total Number of Employees at each shift-Shift3
Total Number of Employees at each shift-Shift4

☒ Check when Number of Employees has been verified

Facility Name Brookhaven National Laboratory

FRS: 69528

The following CAR's were opened for this facility on the date indicated, but have not been closed as of the above print date.
CARS CANNOT be closed without submitting the proper CAR form and evidence of closure.
OFI's CAN be closed simply by making a notation on this page to the Registration Specialist.

BOSH-5	12/07/2006	Minor	<p>OHSAS 18001:1999, Clause 4.3.2 STATEMENT OF REQUIREMENT: The Organization shall establish and maintain a procedure for identifying and accessing the legal and other occupational health and safety requirements and keep this information up to date. STATEMENT OF NONCONFORMITY: Internal BNL IH procedure Industrial Hygiene Requirements Management does not include a regulatory driver for regulation 29 CFR 1910.95 for Hearing Protection, although this regulation has been identified by the SMBS</p>	Open	All Closed - see Reassessment Report
BOSH-4	12/07/2006	Minor	<p>OHSAS 18001:1999, Clause 4.3.4 STATEMENT OF REQUIREMENT: SBSM Interim Procedures 2004-18001-001 & -002 Facility and Job Risk Assessments (respectively, 11/05 revisions) require that the risk factors are re-estimated/recalculated once newer, additional controls are developed and implemented for the identified, associated hazard(s). STATEMENT OF NONCONFORMITY: Risk factors were not re-estimated/recalculated in JRAs or FRAs prepared by the three groups within the ESH&Q Directorate.</p>	Open	
BOSH-5	12/07/2006	Minor	<p>OHSAS 18001:1999, Clause 4.4.5 STATEMENT OF REQUIREMENT: The Organization shall establish and maintain procedures for controlling all documents required... STATEMENT OF NONCONFORMITY: Several local documents in various departments were in use but not included under document control requirements. O OBJECTIVE EVIDENCE: --CMS New Employee orientation and training checklist (Uncontrolled copy in use, controlled by IH50350) --Education department's instructions for the conduct of cryogenic or</p>	Open	

Audit Conducted in Remote Auditor		Auditor Recommendation		Certification Board Approval	
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Signature	Date	Signature	Date
Desk Audit Readiness Review	Recommendation to proceed				
	Recommendation NOT to proceed				
Registration	Recommendation for Registration				
	Recommendation for Registration Pending other Corporate Sites				
	Recommendation for Registration pending CARs				
	Recommendation for a Verification audit				
Upgrade to: You must make a recommendation under Registration in addition to indicating the upgrade standard.	ISO 14001:2004 ISO/TS 16949:2002 ISO 9001:2000 AS9100:2004 Other _____				
Reassessment	Recommendation for Recertification	<i>Kenneth A. Copier</i>	5/25/07		
	Recommendation for Recertification Pending Other Corporate Sites				
	Recommendation for Recertification pending CARs				
	Recommendation for a Verification audit				
Surveillance	No Change to Certificate				
	Certificate Changes Required	<i>Kenneth A. Copier</i>	5/25/07		
Special ** (Requires additional authorization)	Recommendation for Probation	Approval			
	Recommend Probation Removal	Approval			
	Recommendation to Drop _____	Approval			
	Registration	Approval			

Client Management Rep or Authorized Signature

Date

5/25/07

☐ Checked for Signed Contract on file

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Initial Approval



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Ken ClaymanDate: 5/21-25/2007Personnel Interviewed: M. BEBON - DEP DER - OPERATIONS

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	
4.2.4.1	RHIC IS RUNNING THIS YEAR
4.4.1	EXECUTIVE LEADERSHIP TRAINING IN PROCESS
4.3.3	OPERATIONS BUSINESS PLANNING CYCLE IS IN
4.3.4(0)	PROCESS → CREATES HIGH-LEVEL "TO DO" LIST
4.4.4	- INCLUDES LAB LEVEL O+Ts (OSH & E)
4.5.1	- INCLUDES LAB LEVEL MGMT REVIEWS
4.6	- WORKING ON SOME PROCESS IMPROVEMENT
	INITIATIVES, EX
	• R2A2s OF ASSESSMENT MANAGER, PARTICULARLY
	WHEN THE ASSESSMENT IS CROSS-FUNCTIONAL
	- FY 2007 OPERATIONS BUSINESS PLAN (12/15/06)
	- ISM/SAFETY IMPROVEMENT PROJECT PLAN (2006)
	• DEDICATED PM
	• SEVERAL EHS INITIATIVES - INCORPORATES
	THE E/OSH OBJECTIVES & TARGETS
	• EX: ENV. - REDUCTION OF LEGACY WASTE ITEMS
	OSH - REDUCTION OF TRC/DART RATES
	- REV'D: PERFORMANCE ASSESSMENT RECORDS/RESULTS
	(3/27/07) ⇒ STOP-LIGHT (R-Y-G) CHARTS
	• WORKING THE ISSUE OF RECYCLING OF BLDG PARTS
	AT END OF LIFE/DEMOLITION
	- ANNUAL LABORATORY PLAN (ALP; 11/15/06)



AUDIT NOTES

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Element #	
4.1, 4.2	- REVIEW OF THE PLANS DEMONSTRATES GOOD COORDE-
4.3.3	NATION & FLOW-DOWN OF LAB OBJECTIVES GOES
4.3.4(0)	TO "LOWER" LEVELS OF LAB STRUCTURE
4.4.1	- OPERATIONS ORGANIZATION INTEGRATED
4.4.4	ASSESSMENT REPORT (FY06) - REVIEW OF
4.6	'06 OBJECTIVES, SUCCESSES, MISSES, ETC.
4.5.1	- ADDING ELEMENT OF RISK ASSESSMENT TO THE
4.5.2(0)	BUSINESS PLANNING FUNCTIONS
	° CAPTURES DD'S REVIEW OF ALL TYPES OF
4.5.3(E)	ASSESSMENTS DONE IN OPERATIONS AREAS
	ALONG W/ ORPs REVIEW → ASK FOR INPUT
	FROM SELECT STAFF AS WELL
	- MOST RECENT MANAGEMENT REVIEWS FOR OSH &
	EMS (COMPLETED SEPARATELY), MID-DEC. '06
	° 3 ISSUES - SPELLS, FW CLEANUP,
	° FY06 EMS MGMT REVIEW RECORD OF DECISION (ROD)
	3/7/07 - MTG HELD 12/18/06
	° MINUTES & RODs INSTITUTIONAL LEVEL
	OSH M'R (12/19/06)
	- BEGAN A HUMAN PERFORMANCE IMPROVEMENT
	INITIATIVE
	° RECOGNITION OF LIFE- OR HABITUAL TYPE SAFETY ISSUES,
	AS OPPOSED TO ORG OR OPERATIONAL ISSUES
	→ RESULTING IN PART IN REVISING WORK PLANNING
	REQ'TS



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Ken ClaymanDate: 5/21-25/2007Personnel Interviewed: P. WILLIAMS - MGR SHSD, G. GOODE - MGR EWMSD

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Element #	
4.3.3	FY07 ENVIRONMENTAL OBJECTIVES & TARGETS (11/13/06)
4.3.4(0)	FY07 OSH OBJECTIVES & TARGETS (11/9/06)
4.4.4	- THESE ARE CONSIDERED THE INSTITUTIONAL
4.4.5	LEVEL O/T'S → DIRECTORATES, etc. ARE
4.5.1	EXPECTED TO SELECT THE SPECIFIC O/T'S
4.3.2	APPLICABLE/RELEVANT TO THEIR ACTIVITIES/
4.5.2(E)	OPERATIONS
	- SOME OF THE TARGET DEADLINES ON THE OSH
	SIDE WERE POSTPONED TO LATER DATES (SUCH
	AS EOY '07) BECAUSE OF THE WORK REQ'D
	FOR DOE 10 CFR 851 COMPLIANCE - CURRENTLY
	WAITING FOR DOE APPROVAL ON THEIR
	PROPOSED PLAN.
	- EMS - SPDES ISSUES - NITRATE EXCEEDANCES
	⇒ FOCUS ON PLANT ENGRG GROUP
	⇒ WAITING ON NYSDEC APPROVAL OF SLUDGE
	MANAGEMENT/DISPOSAL PLAN
	- E-OBJS - EMS IMPROVEMENT, COMPLIANCE,
	P2, COMMUNICATIONS, GW PROTECTION, ENHANCE
	NAT. RESOURCE/CULT. RESOURCE MANAGEMENT, GM,
	ENV. CLEAN-UP

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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Ken ClaymanDate: 5/21-25/2007Personnel Interviewed: MGRS - EWMUSD, SHSD

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Element #	
4.5.1	REV'D: QTRLY REPORT - 2 ND QTR - FY07 (4/12/07)
4.5.3(O)	OSH
4.5.4(E)	° DART/TRCR → ≤ 0.25 / ≤ 0.65 → CURRENTLY OVER TARGETS
4.3.3	° ENCOURAGING BEHAVIORAL MODIFICATIONS
4.3.4(O)	- OSH O/TS INCLUDE: IMPROVE OSH MS, CONDUCT OSHA EXTENT OF CONDITIONS REVIEWS, IMPROVE ACCIDENT/INJURY RATE PERFORMANCE, IMPROVE THE IMPLEMENTATION OF MAT'L HANDLING TRNG PGM, COMPLIANCE, COMMUNICATIONS, STUDENT SAFETY, TRAVEL
	- PART OF ATTEMPT TO IMPROVE DART/TRCR → INSTITUTING MORE FORMALIZED WORK EVALUATION ACTIVITY - DIFFERENT SOLUTIONS UNDER DISCUSSION (ATTACH IRAS TO WORK ORDERS FOR EX.)
	- ~20 52 PROPOSALS SUBMITTED → WAITING ON FUNDING
	- ESS&H MONTHLY SUMMARY → INCLUDES UPDATES ON RECORDABLE/DART CASES, TRAFFIC SAFETY

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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Ken Clayman Date: 5/21-25/2007

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Element #	
4.6	REV'D: BNL INSTITUTIONAL - LEVEL OSH MANAGEMENT
4.5.3(O)	REVIEW (12/19/06; PRESENTATION MAT'L) & BNL
4.5.4(E)	OSH MR DISCUSSION AGENDA 12/19/06
	- ESS & H POLICY - REVISED PRIOR TO MR
	° REVISED AS OF 9/6/06 → LESS WORDY, TRYING
	TO MAKE IT MORE UNDERSTANDABLE FOR
	EMPLOYEES. DONE BY COMMITTEE W/ INVOLVE-
	MENT BY LINE EMPLOYEES
4.1.4.2	J. ARONSON - LAB DIRECTOR
4.3.3	- DIRECTOR FOR ~1 YR
4.3.4(O)	- FULLY PARTICIPATED ON DIRECTORATE LEVEL
4.4.1	- NEED TO COMMUNICATE HIS EXPECTATIONS
4.4.3	° ALL HAND MTGS
4.5.1	° LEADERSHIP MGMT COUNCIL & POLICY COUNCIL MTGS
	° MONDAY MEMO - EVERY OTHER WEEK
	- INFORMAL VERIFICATION OF EFFECTIVENESS
	- PROMOTING THE HUMAN PERFORMANCE INITIATIVE
	- DIRECTOR'S SAFETY COMMITTEE - CROSS-FUNCTIONAL
	(SCIENCE, TECHS, USERS COMMS, UNION, ADMIN,
	CONSTRUCTION, 4 OTHERS) - APPROX BE-MONTHLY,
	MINUTES GENERATED



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Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Ken Clayman Date: 5/21-25/2007

Personnel Interviewed: _____

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Element #	LAB DIRECTOR
4.5.1	- WALK-AROUNDS - RECORDED - FOCUS ON SAFETY
4.4.3	(HE HAS ONLY DONE A FEW SO FAR)
4.4.1	- COMM. ADVISORY COMMITTEE - STRONG FOCUS ON
4.6	ENV., MONTHLY, ATTENDS REGULARLY
4.1	- RESOURCES MANAGEMENT / PLANNING
	° ANNUAL STRATEGIC PLANNING CYCLE - ANNUAL
	LAB BUS. PLAN → SETS PRIORITIES
	° SPEND MONEY TO SUPPORT THE PLAN
	- MRS - LOOKS FOR THE PROCESS TO DRIVE SENSIBLE
	TARGETS FOR THE UPCOMING YEAR
	- GEN'L CONCERN - INTEGRATION OF EMS/OSHMS
	W/ ISM
	° COMM. PLAN DEVELOPED TO TRY TO OVERCOME
	THE MISPERCEPTION THAT THEY'RE SEPARATE

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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) -- EMS/OSHMS ReassessmentAuditor Name: Ken ClaymanDate: 5/21-25/2007Personnel Interviewed: EMS PGM MGR

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Element #	
	. 2004
4.5.4(O)	REV'D: FINAL REPORT: ISO/4001 EMS & OHSAS 18001:
4.5.5(E)	1999 OSHMS INTERNAL AUDIT (3/13/07) → AUDIT
4.5.3(O)	CONDUCTED IN FEB. 2007
4.5.4(E)	- COVERED PARTIAL SYSTEM - APPROX 1/3rd OF CLAUSES, AS
4.6	WELL AS ANY SPECIFICS THAT THE DEPARTMENTS/
4.4.4	DIVISIONS MAY REQUEST.
4.4.5	- COVERING ALL CLAUSES/REQ'TS OVER A 3-YR
	PERIOD
	REV'D: MEMO - EMS REPS MTG TO Doc. EMS IA
	SCOPE FOR FY07 IA (3/5/07 - MTG HELD
	1/4/07) → DEMONSTRATES REVIEW OF PREV. AUDITS
	TO DETERMINE ITEMS TO ADDRESS, AS WELL AS
	CONSIDERATION OF IMPORTANCE ⇒ GOOD DOCU-
*	MENTATION!
4.2	- GR'D EXTERNAL ACCESS TO ESSIT POLICY ON BNL
4.4.3	WEB SITE
	- SUBS. AREA: ENV. ASSESSMENTS & ESH MANAGEMENT
	REVIEW (5/16/07)
4.4.2	- REV'D: EMS INT. AUDITORS AS OF 5/17/07 (LISTONLINE)
	- SA: NC'S, IDENTIFYING & REPORTING (12/15/03)
	- REV'D: ATS RECORDS FOR FINDINGS (INT & EXT)
	FROM MOST RECENT AUDITS - #3639 FOR FEB IA
	# 3307 (FROM NSF AUDIT IN JUNE '06)

FAM
2 DAYS
TUES/WEDS
1st FULL WK
OF JULY



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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Ken Clayman

Date: 5/21-25/2007

Personnel Interviewed: EMS PGM MGR

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Element #	
4.5.20	FY 2007 SELF ASSESSMENT PLAN → ALL
4.5.3E	ITEMS TRACKED IN ATS
4.5.4E	
4.5.30	ATS #3823 - BROOKHAVEN DOE OFFICE AUDIT
4.6	(H+S - ELECTRICAL CORD ISSUE) - STARTED IN MARCH,
	DUE BY 5/7/07 → NOT CLOSED, COMPLETED OR
	ANNOTATED
	ATS #3696 - MANAGEMENT REVIEW ACTION ITEMS
	EWMSD MANAGER - RESPONSIBLE FOR ANALYSIS OF
	NC/CAPA DATA TO I.D. TRENDS & INITIATE
	ACTIONS AS NECESSARY (REV'D: 2E (EX. - DOC. CTRL.
	LAB-WIDE ISSUE - C-7 NOTIFICATION) - INITIATED
	ACTIONS IN DEC. '06
*	REVIEW (MGMT) - STRONGLY IMPROVED! COVERS
	GOOD LEVEL OF INPUTS, GOOD PRESENTATION OF
	RELEVANT DATA (BASED ON ANALYSES) → CLEAR
	DEMO OF ACTION ITEMS.
	- ACTION ITEMS TO BE TRACKED IN ATS,
	BUT INSTEAD THEY HAVE BEEN ADDED TO
	SOME PEOPLE'S PERFORMANCE REVIEW CRITERIA.
	REV'D: RODS (REV-1) OSH MGMT REVIEW
	STATUS REPORT (5/18/07)

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AUDIT NOTES

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In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	C-AD / SCM
4.1.4.2	OPM 1.10 C-AD ESH Policy (R4, 4/5/06) - Includes
4.4.1	GEN'L DESC. OF OSHMS IN C-AD, INCLUDES GEN'L
4.4.6	RRAs
4.4.4	
4.4.5	OPM 1.10.4 (R4, 6/13/04) OSH MS PROGRAM Desc. FOR C-AD & SCM
	OPM 2.28 C-A Procedure FOR WORK PLANNING AND CONTROL FOR OPERATIONS (5/18/05, R.8)
	- C-AD / SCM DOCUMENTATION HAVE BEEN MOVED TO ELECTRONIC BASIS
	- WORK PERMIT FORM - USED IN WORK PLANNING EFFORTS
	→ Procedure USED TO TRAIN WORK PLANNERS →
	REV'D: LIST OF WORK CONTROL COORDINATORS →
	TYPICALLY A LEAD TECH., GROUP LEADER, OR SOME OTHER EXPERIENCED PERSON
	- REV'D: FRAs / IRAs FOR TWO DEVISIONS → REVIEWED TRIENIALLY
	° He RELIQUIFIER (REV. 0, 4/24/07) - AREA-WD FRA PART OF COLLIDER - CRYOGENIC RING WORKING AT HTS - MOD HAZARD
	° FACILITY-WIDE OXYGEN DEPLETING HAZARD (ODH) (Rev. 0, 12/20/06) 2 UPPER-MODERATE CONDITIONS (50 scores ea.). CONTROLS ADDED, CUT RISK VALUE IN 1/2.



AUDIT NOTES

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Element #	C-AD / SCM
4.4.6	- GEN'L HOUSEKEEPING ISSUES (REV. Ø, 4/28/06) - MODERN
4.5.1	TO LOW RISK PER EVALUATION
4.4.4	- ELECTRICAL WORK - HOT (REV. Ø, 4/6/07) - PLAN/
4.4.5	PGM SET UP TO AVOID INJURIES DUE TO WORK
4.3.1	AROUND HZ-ENERGY ENVIRONMENTS. INCLUDES
4.3.2	PPE, TRAINING REQ'TS
4.5.2(E)	- RADIATION/CONTAMINATION, CALIBRATION
	OF C-A CHEMUNKE IRRADIATOR (2/27/07,
	R. Ø)
	- VACUUM SYSTEM WORK (5/12/06, REV. Ø)
	- WASTE HANDLING (REV. Ø, 3/10/06)
	- MAT'L HANDL'G, MAGNETS (REV. Ø, 5/19/06) - PUTTING
	2 WINDING COILS
	• SCM - NO EXPERIMENTATION ACTIVITIES
	- ENV. ASPECTS MATRIX - COVERS BOTH DIVISIONS
	(11/22/2006) - ANNUAL REVIEW PER REQ'TS
	- SIGNIF. ASPECTS LIST (3/16/07) - JUST ABOUT
	ALL ASPECTS ARE SIGNIF IN C-AD, MANY
	ALSO FOUND IN SCM
	- OP GTRES: OCF - RHIC COOLING WATER SYSTEMS
	(2/12/07) LOOP 14.91
	• W/RY MONITORING OF CHEM ADDITIVES
	• MO'LY EFFLUENT MONITORING/REPORTING

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Element #	C-AD / SCM
4.5.1	° INSPECTIONS OF CHEM STORAGE / FEED SYSTEMS
4.4.6	° CHEM MGMT SYSTEM
4.3.1	° SEVERAL MORE OPMs DEFINING CONTROLS FOR
4.4.4	SPECIFIC ISSUES
4.4.5	° MAINTENANCE PLAN NOTED ON OCF
4.5.2(0)	OPM 14.5.1 OCF FOR MAGNET CLEANING OPS (REV. 2 2/12/07)
4.5.3(E)	° CORR. ACTIONS TRACKED THRU FAMILY ATS
	- ORPS LEVEL ISSUE WOULD BE TRACKED VIA
	INSTITUTIONAL ATS
	- OCF NOTES TRAINING NEEDS/REQTS RELATIVE
	TO THE ENV ^{OSH} ISSUE(S)
	OPM 14.14.1 OCF FOR NASA SPACERAD LAB (2/12/07, R.2)
	° SOIL CAPS → BEAM LOSS DESIGN PRACTICE
	° QRTLY GW MONITORING - ANN. REPT
	° MAINT. PLAN ° MOU OTHER AGREEMENTS w/ OTHER
	° REACTION PLAN DECISIONS FOR SUPPORT
	OPM 14.23.1 OCF FOR SMD SMALL SCALE TINKING / BUS BAR TINKING
	(REV. 1, 3/06)
	OPM 14.31.1 OSH OCF FOR O+M ACTIVITIES (1/24/07 R.2)
	° CONTROLS DEFINED IN FORMAL CONDUCT OF OPERATIONS
	(CO) MANUAL → INCLUSIVE OF VARIETY OF SAFETY
	PREVENTION MEASURES



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Element #	C-AD/SCM
4.4.2	- TRNG MGR W/SUPV, EST INPUT → DEVELOP JTAS PER JOB CLASSIFICATION → INCLUSIVE OF OVERALL COMPETENCY REQ'TS. EMPLOYEE NOTIFIED BY E-MAIL; TRACKING BY SYSTEM & SUPV. ° ASSIGNMENTS GIVEN BASED ON TRNG COMPLETION ° PERSON CAN HAVE MORE THAN 1 JTA
4.3.3/	- FY07 C-AD/SCM OBJECTIVES & TARGETS
4.3.4(0)	° OPM 14.1 (R.3, 3/15/07) EMP FOR C-AD/SCM
4.5.1	° REF TO LEGAL/OTHER REQ'TS
4.4.3	° LATEST SET OF O/T'S WERE SELECTED BY THE WOSH COMMITTEE
4.5.3(0)	° TRACKING IN F-ATS - REV'D F-ATS # 3499 -
4.5.4(E)	INCLUDES O/T'S AND "ACTION ITEMS" ° ONE O/T THAT ALIGNS DIRECTLY W/LAB- WIDE PRIORITIES/GOALS
4.5.1	° DATA COLLECTED USED AS INPUTS TO MGMT. REV'W
4.5.4(0)	- ANNUAL SELF-ASSESSMENT ALSO INCLUDES REV'W
4.5.5(E)	OF THE SUCCESS OF THE O/T'S. ° OPM 14.30 C-AD/SCM OSH MP FOR ACCELERATORS, EXPERIMENTAL AREAS, SHOPS &/OR OFFICES (5/12/07)



AUDIT NOTES

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Element #	C-AD/SCM
4.4.3	- WASH COMM. ABOUT 15 PEOPLE - INCREASED BY 5
4.5.1	WORKERS THIS YEAR
4.4.4	- WEEKLY MANAGER INSPECTIONS → WORKER'S
4.4.5	INVOLVED → GREATER INVOLVEMENT
4.5.3(0)	- REV'D: PERFORMANCE INDICATORS FOR C-AD - 2 ND
4.5.4(E)	QTR '07. (5/22/07)
4.6	- FY06 C-AD/SCM MANAGEMENT REVIEW- 10/11/06
	° AGENDA
	° REV'D: PRESENTATION SLIDES FROM MR MTG.
	° R.O.D. - 10/28/06
	- REV'D: MEMO- MINUTES SMD SELF-ASSESSMENT
	JAN. 30, 2007 (2/7/07) ⇒ MR FOR SCM
	° REV'D PRESENTATIONS ASSC'D W/ MINUTES AS WELL
	° INCLUDES ROD → TRANSFERED TO OPM 14.1 (EMS) & OPM 14.30 (OSHMS)
4.5.2(0)	- REV'D: ATS #3499 SELF ASSESSMENT FY 2007
4.5.3(E)	° INCORPORATES ALL OBJECTIVES/TARGETS FOR C-AD/SCM, PROVIDES MEANS/TIME FRAMES & RPS; ALLOWS FOR TRACKING TO CLOSURE
	- REV'D: RECORD FROM RESPONSE TO OIL SPILL THAT OCCURRED 6/8/06 → WHILE COIL PRESS WAS BEING DECOMMISSIONED. NO CHANGE TO PROCEDURES RESULTED.

* CLOSE FINDINGS FROM PREV AUGUST 2006

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Element #	C-AD/SCM
4.5.1	- REVID: TIER I SCHEDULE - 2007
4.5.2(O)	° RECORDED/REPORTED USING ATS → REVID EX'S
4.5.3(E)	° PERFORM SPOT-CHECKS AFTER ACTIONS SHOULD
4.6	HAVE BEEN TAKEN
	° ESS/HQ MANAGER SELECTS ABOUT 10 OR 50 TO
	COMPLETE ADD'L INSPECTIONS
	° ~ 1000 ACTION ITEMS GENERATED
	° MOST ISSUES APPEAR TO BE ELECTRICAL COMPLIANCE
	⇒ NEC TRAINING INITIATIVE IS A RESULT
	OF THIS RECOGNITION.
	° SOME OF THE DIFFICULTY IN ADDRESSING MORE
	ISSUES HAS TO DO W/ \$ AVAILABILITY.
	- CONSTANT DISCUSSION AT MANAGEMENT LEVEL
	- DECISION HAS BEEN MADE THAT BEGINNING
	IN FY 09 THAT GPP (INFRASTRUCTURE)
	FUNDS WILL NOT BE ALLOCATED FOR SCIENCE
	ACTIVITIES.
	- REVID: QUARTERLY PERFORMANCE EVALUATION
	REPORT (5/20/07) → SENT TO ALL BNL, C-AD
	MANAGEMENT, C-AD STAFF, DOE REP
	° CRITIQUES → INCIDENTS THAT ONLY C-AD
	DEALS WITH - ATS TRACKING.



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Element #	C-AD/SCM
4.4.2	- APPROXIMATELY 10,000 TRNG REQ'TS APPLY TO ALL C-AD/SCM STAFF → GENERALLY ONLY ~2-3% NON-COMPLIANCE AT ANY TIME
4.4.6	REVIEW FOLLOWING OPERATIONAL DOC'S (ALL OPMs)
4.4.4	2.1 OPERATIONS ORGANIZATION & ADMIN. (REV. 4, 4/13/07)
4.4.5	⇒ SETS RRA'S FOR C-AD OPERATIONS PERSONNEL
4.3.1	2.5.2 RHIC ACCELERATOR SAFETY ENVELOPE PARAMETERS (R3, 6/12/04)
4.3.2	⇒ PLANNING INCLUDED IN RSC/ASSC/ESRC CHECKOFF
4.4.7	LISTS IN THE MAIN CONTROL ROOM
	SEVERAL LOTO PROCEDURES INCLUDED IN CH. 2 OF OPM
	2.19 RESPONSE TO WATER "MAKE-UP" ALARMS (R5, 5/29/06)
	2.29 PROCEDURE FOR ENHANCED WORK PLANNING FOR EXPERIMENTERS (R3, 5/26/04)
	9.2.1 REVIEW EHS ASPECTS OF AN EXPERIMENT (R8, 9/12/05)
	1.7.1 C-AD HOUSEKEEPING POLICY (RØ, 10/17/06)
	1.12 TRNG & QUAR. PLAN (R5, 2/22/06) - VERY THOROUGH!
	1.14 GEN'L REQ'TS FOR LIQUID & OUTDOOR STORAGE (R2, 6/16/05)
	→ EMPHASIS ON MONITORING/MANAGEMENT
	1.15 LIQUID & AIRBORNE EFFLUENTS (R3, 3/15/07)
	1.27 MANAGER WALK AROUND & SAFETY OBS. REPT (R2, 1/2/07)
	CH. 3 INCLUDES A LARGE SET OF EMERGENCY PROCEDURES →
	COVERS BOTH BLDGS AND SPECIFIC OPERATIONS; INCLUDES ID OF EMERGENCY HAZARDS

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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Ken ClaymanDate: 5/21-25/2007

Personnel Interviewed: _____

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	C-AD/SCM
4.4.6	CH. 14 EMS/OSHMS SPECIFIC PROCEDURES - Ex
4.4.7	14.2 EMS PROCESS ASSESSMENT FOR TANDEM VAN DE
4.4.4	GRAFF FACILITY (R2, 1/22/07)
4.4.5	14.2.2 EMS TRAINING FOR TANDEM VAN DE GRAFF
4.4.3	FACILITY (R2, 1/22/07)
	14.5 EMS PROCESS ASSESSMENT FOR MAGNET CLEANING
	OPERATIONS (R2, 2/12/07)
	9.8.1 WOSH COMMITTEE POLICY & REQTS (R2, 1/30/06)
	→ MTG AT LEAST QUARTERLY
4.4.1	C-A MAIN CONTROL ROOM (MCR)
4.4.2	T SHREY - OPS. COORDINATOR
4.3.1	- CONTROLS ALL ACCELERATORS
4.3.3	- LIAISON FOR EXPERIMENTERS
4.5.3(0)	- WORK TO MINIMIZE RADIATION - USING HEAVY IONS
4.5.4(E)	- WORK PLANNING - MUST BE COMPLETED BEFORE WORK
	IS DONE
	° MCR WORK CONTROL SYSTEM (ONLINE)
	° REV'D EXAMPLES - JOB #47 VACUUM LEAK CHECK
	(LOW HAZARD); JOB #56 TROUBLESHOOT ANODE SUPPLY
	FOR THE X1 r f CAVITY
	- DESCRIBED TRNG REQTS FOR WORK IN MCR

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AUDIT NOTES

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Personnel Interviewed: _____

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	C-AD/SCM
4.4.6	- RADIATION - CONT. MONITORING WHEN BEAM IS
4.5.1	RUNNING
4.3.3	° NEUTRON MONITORS (CHIPMONKS) - CONSTANT MONI-
4.4.3	TORING → LOSS MONITORING ↔ PRIMARILY FOR PER-
4.4.1	SONNEL MONITORING, CAN BE USED FOR ENV. AS WELL
	- OBT - MINIMIZE RAD/HZDS
	- MEMBER OF WOSH COMM. - DESCRIBED INVOLVEMENT, ROLES
4.4.4	- KEEP SET OF OPMs AS HARD-COPY BACK-UP TO ONLINE
4.4.5	DOCUMENTS
	- USE TEMP. PROCEDURES IN CASES OF SHORT-TERM
	EXPERIMENTS (REV'D EXAMPLES)
4.4.2	- ALL OPERATORS MUST READ & ACKNOWLEDGE ALL APPLICA-
	BLE OPMs BEFORE STARTING WORK.
	- NEW OPERATORS → READ DOCS, GET LAB-RELATED
	TRAINING, MENTORING BY OPS. COORD. FOR @
	6 MONTHS (SOMEWHAT FLEXIBLE) → OC/TRNG COORD
	SIGN-OFF
	P. INGRASSIA - SR MCR GR/LDR
4.4.2	- DESCRIBED MCR TRNG PROCESS/REQTS
4.5.3(0)	- MCR OPERATOR ESTHQ (OPM) TRNG. REQTS - COVERS
4.5.4(E)	UP TO 4 WEEKS WORTH OF ACTIVITIES. → THIS IS IN
	EXCESS OF LAB REQ'D TRNG.



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Ken ClaymanDate: 5/21-25/2007Personnel Interviewed: MCR GEP MGR

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	C-AD/SCM
4.4.2	° AFTER OPM TRNG COMES MACHINE-BASED TRNG (CLASSROOM)
4.5.3(O)	° TRNG INVOLVES COMBO OF READING, OBSERVING, DOING
4.5.4(E)	° WORK CAN START BEFORE ENTIRE SET OF REQ'D TRNG
4.4.6	IS COMPLETED
4.4.3	° ALL TRNG IS TRACKED → CLASS ATTENDANCE RECORDS
4.3.1	(REV'D) → EXAMS TO DEMONSTRATE UNDERSTANDING
	& COMPLETION
	° MACHINE SPECIALISTS - ADD'L REQ'ITS.
	° EH & S ISSUES CAPTURED IN THE BASIC OPM TRNG
	IN FIRST FEW WEEKS
	° GATHERS FEEDBACK FROM CREW CHIEFS RE: COMPETENT
	PERFORMANCE BY OPERATORS, TECHS, ETC.; PERF. APPRAISALS
	AS WELL. GENERALLY RECORDED INFORMALLY (E-MAILS)
	- REV'D: FEEDBACK FOR A PERF. APPRAISAL INPUT.
	(FROM A SHIFT SUPV FOR A TECH TO GROUP LDR)
	° OPM TRNG - SIGN-OFF BY DEP. GRP LDR
	° ANNUAL REQUALIFICATION TRAINING ROLISTS (2 TYPES)
	~~~~~
	NSRL - M. SIVERTZ - PHYSICIST
4.4.1	- DIFFERENT TYPES OF EXPERIMENTS - MOST BIOLOGICAL,
4.3.1	OTHERS - PHYSICS
	- M.S. - COORDINATES PHYSICS EXPERIMENTS, OPERATE BEAM LINE



## AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Ken ClaymanDate: 5/21-25/2007Personnel Interviewed: NSRL - A. RUSEK - PHYSICIST / MAINTENANCE

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	C-AD/SCM
4.3.1	- RAD HERDS - MINIMAL DUE TO EXISTING CRTS
4.4.6 *	° IRIS SCAN - KEYED TO COMPLETION OF APPROPRIATE TRNG ⇒ ACCESS TO TARGET RM.
	- BIOL. HERDS - CELL SAMPLES, LIVE ANIMALS
	° DBL CONTAINMENT FOR CELLS
	° RAD TECH PRESENT DURING BEAM WORK
	° MOST BIO WORK DONE AT MEDICAL FACILITY
	- ENV. ASPECTS - RADIATION SOURCES (BEAM) → BEAM DUMP (CONC/DIRT PILE) ⇒ DESIGNED TO ACCOMMODATE IRRADIATION OVER A MULTI-YEAR PERIOD. TO DATE THEY HAVE NOT USED 10% OF AVAILABLE CAPACITY.
4.5.1	° DURING COMMISSIONING - TESTS COMPLETED TO DE- TERMINE EXTENT OF PROBLEMS DURING "FAULT" CONDITIONS.
	- WATER WASTES - MANAGED AS SUSPECT RAD WASTES (FROM ANIMAL EXPERIMENTS) → 5 GALS / 3 YRS)
4.3.3	- ELIMINATED FILM OPS - CHANGED TO DIGITAL CAMERA SYSTEM
	- SHIELDING MATLS - HANDLED AS RAD.
	° USED MORE THAN ONCE BEFORE DISPOSAL
	° HEALTH PHYSICS MANAGES

## AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Ken ClaymanDate: 5/21-25/2007Personnel Interviewed: MAGNET - T. DELGEN - TECH PROJ SUPV.

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	
4.5.1, 4.5.3(d) 4.5.4(E)	O/IH CRANE/HOIST INSPECTION CHECKLIST - REV'D RECORDS
	EH SQ-D
4.3.4.4	B. SELVEY - IH Manager, D. BAUER - ECR
4.5	O/TS ESTABLISHED AT DEPT/DEV/OFFICE LEVEL
	- RAD CON MS - FY07 WORK SCOPE & SELF-ASSESS PLAN (R1, 1/23/07)
	- ESH/UNSD SELF-ASSESSMENT PLAN & FY2007 (R.0, 12/12/06)
	- REV'D: ESH & Q ASPECTS ANALYSIS (RB, 5/18/07)
	Includes ASSESSMENTS SCHEDULE IN ADD'N TO E/OSH O/TS/EMPs
	- QMO FY2007 ANNUAL PLAN
	- SHSD FY07 BUSINESS PLAN (1/26/07) - ATT. 7.1
	REG COMPLIANCE, MANAGEMENT SYSTEM & SELF-ASSESSMENT PLANS
	- SHSD FY07 OSH OBJECTIVES (R1, 4/26/07)
	° 2007 INTERNAL EVALUATION OF THE O/IH SMS FOR SHSD RECORDS MANAGEMENT, DOCUMENT CONTROL & REQUIREMENT MANAGEMENT (DRAFT, R1, 5/14/07) ⇒
	THOROUGH AND COMPLETE - SHOULD RESULT IN SUBSTANTIAL IMPROVEMENTS IN DIVISION



## AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment  
 Auditor Name: Ken Clayman Date: 5/21-25/2007  
 Personnel Interviewed: M. DAVIS - PROJECT ENGR.

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	ESHQD - EWMSD
4.4.1	- NEPA PGM, PCB MGMT, CULTURAL RESOURCES, SELF-ASSESSMENT COORD.
4.3.3	- SAP COORD -> PRODUCE PLAN PER FY; MEET w/MGR +
4.3.4(0)	SECTION LEADERS TO GET INPUT, PRODUCE/FINALIZE;
4.5.1	DISTRIBUTE; QTRLY REPORTS
4.5.3(0)	° EWMSD QTRLY REPORT - 2 ND QUARTER FY07
4.5.4(E)	(5/15/07)
4.4.4	° EWMSD SELF-ASSESSMENT PLAN (SAP) FY2007
4.4.5	(RØ, 12/12/06)
	- MOST ITEMS ARE TRACKED IN FAMILY ATS (FOR SAP -> INCLUSIVE OF E/OSH O/Ts)
	- QTRLY REPORT INCLUDES STATUS OF PROGRESS TO ACHIEVE O/Ts - REV'D IN DEPTH - MOST ITEMS APPEAR TO BE ON TARGET/SCHEDULE
4.3.1,	- NEPA REVIEWS - SHOWED/DESCRIBED PROCESS
4.4.6	USED. REV'W COMPLETED FOR JUST ABOUT ANY
4.3.2	ACTIONS AT THE SITE - LAB EXPERIMENTS,
4.5.2(E)	CONSTRUCTION, OTHERS ACTIONS.
	° REV'D: MEMO - NEPA REV'W OF BNL WFO PROPOSAL w/RMD, Inc. (5/22/07).
	° DOE MUST ALSO CONCUR, SIGN-OFF OF PROPOSAL PROJECT REQUESTS RE: NEPA ISSUES.

## AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment  
 Auditor Name: Ken Clayman Date: 5/21-25/2007  
 Personnel Interviewed: _____

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	ESHQD-EWMSD
4.4.6,	° ENV. EVAL'N. NOTIFICATION FORM → USED WHEN PROTECT
4.5.2(E)	DOES NOT FIT INTO CAT EXCLUSION. DEFINES
4.5.4(E)	CONTROLS FOR ISSUES ID'd → COULD LEAD TO
	AN EA.
4.3.3	PCB REDUCTION - 90% OF PCB-CONTAINING EQPMT
	HAS BEEN REMOVED OVER PAST 6 YRS (TRACKING
	CHART AS OF 10/2/06)
4.3.1,	- CULT RESOURCES → CR MANAGEMENT PLAN (3/05)
4.3.3	° REV'W OF BLDGS > 50 YRS, DETERMINE IF THEY'RE
4.4.4	ELIGIBLE FOR THE NAT'L REGISTRY
	- SO FAR, 3 FACILITIES ARE ^{ELIGIBLE TO BE} LISTED
4.3.2	° CR MGMT - LEGAL REQ'T
	~~~~~
	T. GREEN - PROJ. ENGR / CULT-NAT. RES. MGR.
4.4.1	→ OVERSEE MGMT/CARE OF LAND AT LAB THAT IS UNDE-
	VELOPED
	- COORDINATION W/EXT. GROUPS ON CTRAL PINE BARRENS
	AREA IN L.I.
4.4.2	- EDUCATION COORD FOR DIV. → COORD. W/EDUCATION
	DIV. ON PLACING STUDENT INTERNS
	- WORKS W/M. DAVIS ON NEPA REVIEWS
4.3.1	- PICK-UP ASPECTS FROM NEPA & ESRs



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Ken Clayman Date: 5/21-25/2007

Personnel Interviewed: _____

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Element #	ESHQD-EWMSD
4.4.1	- REV'W: WORK PLANS FOR EHS ISSUES - REVIEWS
4.4.6	- PROVIDES RESOURCES TO ENSURE PROPER TRAINING OF
4.4.2	STUDENTS RE: EHS REQ'TS
	- EMPHASIS ON TECK TRAINING THIS YEAR
4.3.3	- LAST ROUND OF PERF. TRACK GOALS - HE HELPED TO
4.5.1	INCREASE AMT OF LAND IN NATIVE VEGETATION
	MODE.
4.3.2	- LAND MGMT - LIMIT IMPACTS ON NYS THREATENED/ENDANGERED
4.4.6	SPECIES. (TIGER SALAMANDERS) → LEGAL REQ'TS
4.5.1	° ANY SOIL DISTURBANCE - THEY REVIEW, MAY ADD RESTRIC-
4.5.4(e)	TIONS (DIGGING PERMITS)
	° MONITOR BY OBSERVATION (PLANT ENGR ALSO IN-
	SPECTING) → OBS'NS NOT RECORDED.
	° REV'D: PERMIT TO CONSTRUCT A NEW RECHARGE
	Basin at RHIC; PAVING 1002; 1004 -
	NYSDDEC PERMIT #1-4722-00032/00135.
4.4.2	- RESPONSIBLE FOR 2 EMPLOYEES → ENSURE THEY UNDER-
4.4.1	STAND ROLE/RESPONSIBILITIES RE: HFS; WORK
	W/STUDENTS - INTERNS IF BOSS.

AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment
 Auditor Name: Ken Clayman Date: 5/21-25/2007
 Personnel Interviewed: _____

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Element #	ESHQD - SHSD
	P. WILLIAMS - SHSD MGR, B. SELVEY - ITH MGR.
4.4.3	- STAFF MTGS / ALL HANDS MTGS - DISCUSS EHS
4.3.1	ISSUES
4.4.6	- ENV. ASPECTS - ONE SIGNIFICANT - HAZ WASTE
4.4.2	IN SAMPLE COLLECTION / CALIBRATION GROUP
4.4.4	- ITH GROUP - PROCEDURES, ALL STAFF TRND
4.4.5	° IHS0200 - ITH GROUP'S OSH PROGRAM & OHSAS
4.1	18001 REGISTRATION => DURING TRNG, GO OVER
	IRAs, POLICY, ROLES, ETC (JPM COMPLETION
	CERTIFICATE -> ATTACHED TO PROC) - R1, 10/10/05
	° IHS0900 ITH GROUP'S EMS PROGRAM (R2, 2/1/07)
	- SHSD OPERATION ENVIRONMENTAL EVALUATIONS
	(SO EE; 9/16/06) -> LIST OF EVALUATIONS
	FOR ALL ITH GROUP ACTIVITIES / OPERATIONS
	EACH EVAL ALSO LINKS TO THE FRAs/IRAs
	EX: SHSD-EMS-02A AIR CURRENT INDICATOR
	TUBES (R2, 3/14/07)
	- REVID: SHSD IRAs / FRAs:
(R1, 5/14/07)	° SHSD-IRA-01 HEPA FILTER SURVEILLANCE
	TESTING IN-PLACE SYSTEMS & VACUUM CLEANERS
	° SHSD-FRA-01 Bldg 120 (12/13/06, R2)

AUDIT NOTES

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 Personnel Interviewed: _____

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Element #	ESH QD-SHSD
4.4.3	- REV'D: "PRIMER ON OHSAS 18001" (5/18/07) -
4.4.2	PRESENTED AT ALL HANDS MTG
	- SHSD ALL HANDS MTG (PRESENTATION - 1/17/06)
	- ESH COORDINATORS - MEET MO'LY - MINUTES
	GENERATED - REV'D AGENDA/RECORDS - 2006
	- REV'D: LIST OF JTA LINKS FOR SHSD
	EMPLOYEES
4.5.3(0)	- REV'D: OHSAS 18001 DOCUMENTS/RECORDS MAINTAINED
	BY SHSD (2/2/07) → INDICATES RETENTION
	REQ'TS & FILE CODES NOTING STORAGE LOCATION
	~~~~~
	RAD CON - C. SCHAEFER - MANAGER
4.4.1	- SUPPORT SITE FUNCTIONS RE: RAD OPERATIONS, SOME
	IH
	- ACCELERATORS, WASTE MGMT, BENCH-TOP ITEMS
4.5.1	- INSTRUMENTATION/CALIBRATION
4.4.6	- PROCESS THEIR OWN TLD INDICATORS (WHOLE-
	BODY DOSIMETERS).
4.4.1	- FIELD OPS - MAJORITY OF ACTIVITIES - 7 GRPS
	• RESIDUATION • ACCELERATOR • F&O
	• WASTE MGMT • LIGHT SOURCE • LIFE SCI
	• SENS/BLIP ⇒ 20 RAD-CON TECHS
	6 SUB-CON TECHS

## AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Ken Clayman Date: 5/21-25/2007

Personnel Interviewed: _____

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Element #	ESHQD-RAD-CON
4.4.2	- "PROFESSIONALS" - DISTINGUISHED BY HAVING A COLLEGE DEGREE IN RELATED FIELD, SUPV. ^(1YR) EXPERIENCE, 3YRS ESH
	° GRADED PROCESS PER LEVEL OF EXPERIENCE AND TO ADVANCE
	- MONITOR ONGOING COMPETENCY/PROGRESSION:
	° CLASSROOM TRAINING
	° TIME REQ'TS PER ANSI 5.1 STD (NUKE IND.)
	° ORAL EXAMS - PGM REQ'TS - THEORY, INST, 2 OTHER CATEGORIES
	° ANNUAL PERF. REVIEWS
4.4.4	- PROCEDURALLY GOVERNED - MANUALS CREATED TO
4.4.5	GUIDE TESTING, REV'D TRIENNIALY
4.4.6	° HP-SOP-006 CONDUCTING RCT ORAL & DEMONSTRATIVE EXAMS (R2, 1/31/05)
4.3.1	- ENV. ASPECTS - SOME ACTIVITIES GENERATE LLRW, BATTERIES, SOME RAD SOURCES (RETURNED TO ORNL), SAMPLES W/RAD, NON-RAD PKG WASTES
	- HAZARDS/RISKS - RAD ISSUES, CARRYING HEAVY EQPMT, EXTENSIVE WALKING, IH WORK (NOISE, LEAD), SEVERAL OF THE LAB'S ISSUE
	° FRA-01 RCT (R4, 5/8/07)



## AUDIT NOTES

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Personnel Interviewed: _____

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Element #	ESH/QD - QMO
	J. Wilke - Quality ENGR
4.4.1	- WORKING ON HUMAN PERFORMANCE EFFORTS
4.3.3	- HELPED DD w/ OPS PLAN, ASSISTING w/ PERIODIC
4.3.4(O)	REVIEWS
4.5.2(O)	- CONDUCTS CAUSAL ANALYSIS
4.5.3(E)	- ISM/SAFETY IMPROVEMENT PLAN SUPPORT → CREATED
	QMO DETAILED PROJECT PLAN
4.3.2	° EMPHASIS ON REV. TO REQ'S VERIFICATION
	TASK, REVISION TO SBMS
4.3.1	- ENV. ASPECTS - PAPER (RECYCLING), INK CARTRIDGES,
4.4.4	ENERGY USE/CONSERVATION
4.4.5	- REV'D: QMO FRAs/IRAs
4.5.3(O)	° IRA-QMO-04 DRIVING VEHICLES (R1, 5/21/07)
4.5.4(E)	° IRA-QMO-02 WALKING (R2, 5/21/07)
	° QMO-GRG-GEN-OFF GEN'L OFFICE SPACE & KITCHEN
	AREA (R2, 5/22/07)
4.3.3	- QMO O/Ts/MPs ("130/06)
	° 2 EMS, 4 OSHMS OBJECTIVES
Note-Worthy	- REQUIREMENTS MANAGEMENT EA → CLEAN-UP,
	REVISION, VERIFICATION EFFORTS; SUPPORT
	TO ISM/SAFETY IMPROVEMENT EFFORT → WELL
	DESIGNED!



## AUDIT NOTES

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Personnel Interviewed: _____

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Element #	ESH: QD - <del>QD</del> Assoc. Lab Dir (ALD - J. TARPINAN)
4.5.1	- INJURIES RATE IS UP FROM FY06 → BASED ON REV'W,
4.5.2(O)	APPEARS RELATED TO INADEQUATE WORK PLANNING
4.5.3(E)	FOR PAST ISSUES; CURRENT PROBLEMS APPEAR TO
	BE "ACTIVITY OF LIFE" INCIDENTS NOT FROM
	LACK OF FOLLOWING REQ'TS
	° LOOKING TO INSTITUTE A "SAFETY IS 24/7"
	CAMPAIGN - JUST IN PLANNING PHASE
	° THINKING ABOUT GETTING PPE DISCOUNTS AT
	LOCAL RETAIL STORES.
4.5.2(E)	- ENV. COMPLIANCE - MUCH BETTER RESULTS; WORKING
	HARDER TO ADDRESS NC'S MORE EFFECTIVELY;
	DOING MORE IN THE PREV. ACTION DIRECTION.
4.5.1	° TRYING MORE TO DEVELOP METRICS THAT PRO-
	VIDE "LEADING" INDICATORS OR PRECURSORS
	TO POSSIBLE EVENTS.
4.5.3(E)	- EVENTS & ISSUES MANAGEMENT SA - PROVIDES A
4.5.2(O)	MEANS TO REPORT INCIDENTS BELOW DOE-REPORTA-
4.5.1	BLE THRESHOLDS → GIVES LEADING INDICATORS
4.6	OF POSSIBLE ADVERSE CONDITIONS.
	° ALSO USING "MANAGEMENT CONCERNS" OR "NEAR-
	MISSSES" FROM ORPs TO HELP w/ THIS EFFORT
	→ QMD REPORTING.





## AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Ken ClaymanDate: 5/21-25/2007Personnel Interviewed: ESHQD - ALD

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	
4.3.3	° ANOTHER SET OF LI DATA - SAFETY OBSERVATIONS
4.4.3	- REV'D CHART OF #SAFETY OBS/MO FOR FY07
	YTD (THRU MAR.) ⇒ DATA ARE ALSO BROKEN
	DOWN BY TYPE OF ISSUE(S); SHOW PPE TO BE
	THE MOST OUTSTANDING SET OF ISSUES.
	° TAKING INFO. TO DIRECTOR'S SAFETY
	COMM. FOR FURTHER ANALYSES & ACTION
	PLANNING
4.6	° MANAGEMENT REVIEWS - SEPARATED - EV. OSH
4.5.3(O)	° PERF. GOALS - TIED TO ANNUAL BUS PLAN, LAB
4.5.4(E)	BUS. PLAN, R2A2s, ESSH GOALS
	→ - MTG. MINUTES - SUPPORT ORGS. REPORTING
	TO THE DIRECTOR (SORD) EMS/OSH
	MGMT REVW (9/22/06)
	° MRS - PROVIDE OPPORTUNITY TO EVALUATE MS
	DATA AND DETERMINE OFF'S → TRACKED IN
	ATS.

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## AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Ken ClaymanDate: 5/21-25/2007

Personnel Interviewed: _____

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	ESITQD - LTRA
	W. DORSETT - LTRA Group Mgr., V. RACANELLO - Project Mgr
4.3.1	- MONITORING/SAMPLING WORK, DRILLING
4.4.6	- TICKS! - PREPARATION, PPE, USE OF SPRAYS,
	CHANGE CLOTTES
	- STF'S,
	- CONTRACTOR MANAGEMENT - A BIG FACTOR, USE OF
	LONG-TIME GROUPS & INDIVIDUALS HELPS MAINTAIN
	GREATER SAFETY/ENV. CONDITIONS
4.5.1	° FIELD ENGRS OR GEOLOGISTS OVERSEE MUCH OF
	THE WORK, ENSURE IMPLEMENTATION OF REQ'TS
4.4.3	° DAILY TAILGATES? COVER EHS AS WELL AS OPERA-
4.4.2	° WEEKLY MTGS   TIONAL
	- REV'D: FRAS/JRAS
4.4.4	° OFF-SITE GWTS (OS-1-08-6, R1, 5/16/07)
4.4.5	° GW/POTABLE WATER SAMPLING (R1, 3/16/06)
	- LTRA O/Ts - QTRLY REPORT - 2 ND QTR '07
	- EM-SOP-213 FIELD ACTIVITY OVERSIGHT OF (SUB)
	CONTRACTORS (REV. 12/15/06)



## AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Ken ClaymanDate: 5/21-25/2007

Personnel Interviewed: _____

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Element #	ES/HD - WM
	M. CLANCY - Dep. Div. Mgr.
4.4.1	- SERVICE LAB FOR ALL TYPES OF HAZ/RAD WASTE
4.3.1	° PICK-UP, PREPARE, PICK
4.3.3	° WATER - EITHER SOLIDIFY OR SHIP TO OAK RIDGE
4.4.2	- LAB CLEAN-OUTS → MAT'L'S SEPARATION, ^{PREP FOR} LAB
	PACKING, ARRANGE SHIPPING
	- RESP. FOR RCRA BLDG - ONLY 1/2 OF BLDG IS
	OPERATED BY WM
	° RESULT OF SIGNIFICANT RED'N OF WASTE GEN
	FROM AROUND THE LAB
	- ENV. ASPECTS TABLE - JUST ABOUT ALL ARE
	SIGNIF. ⇒ CONTROLLED BY OPERATIONAL CTRL
	PROCEDURES (REV'D INDEX)
	- IRAs/FRAs - REV'D ONLINE
4.3.3	- REV'D O/TS/MPs & RESULTS THRU 2 ND QTR FY07
4.3.4(O)	° WHEN THEY DISCUSS SAFETY ISSUES - TALK
4.5.3(O)	ABOUT PERSONAL AS WELL AS WORK ENVY'S
4.5.4(E)	° DEVELOPED PROCEDURE FOR DIVISION RE:
	SAFETY OBSERVATIONS
	° DESCRIBED ACTIONS/STATUS OF MPs



## AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Ken Clayman Date: 5/21-25/2007Personnel Interviewed: RAD CON - MGR

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	
4.3.3	RAD CON MANAGEMENT SYSTEM - FY07 WORK SCOPE
4.3.4(O)	Self-ASSESSMENT PLAN (R.1, 1/23/07)
4.3.2	- REQ'S MANAGEMENT / IDENTIFICATION
4.5.2(E)	° INCLUDED IN SITE-WIDE RAD CON MANUAL
4.5.1(O)	° USE INFO TO DEVELOP / MAINTAIN PROCEDURES
4.4.4	° USE AS BASES FOR TRAINING
4.5.3(O)	° MANAGERS SUBSCRIBED TO VARIOUS INFO SOURCES
4.5.4(E)	TO KEEP-UP W/LEGAL, OTHER REQ'S - EPCOG, IEEM NEWSLETTER, CFR'S, NETWORKING, HEALTH PHYSICS SOCIETY
	° BENCHMARKING V. OTHER DOE FACILITIES/SITES
	° SURVEILLANCE PROGRAM, USING CKLETS, TO CONFIRM COMPLIANCE W/RELEVANT REQ'S
	- 2 SURV'S/QTR
	- SEMI-ANNUAL - MANAGER'S REVIEWS
	- REV'D: RECORDS OF SURVEILLANCE REVIEWS - FINDINGS RECORDED IN FAMILY ATS
	° TOPICAL AREA ASSESSMENTS - REQ'D BY DOE, 10 CFR 835 - COVER ALL AREAS OVER 3YR PERIOD
	- USE ASSESSORS FROM OTHER LABS
	- REV'D: TRIENNIAL ASSESSMENT TA-07-01 (SUBMITTED 3/23/07, MEMO DATED 4/25/07)
	° COVERED EMERGENCY EXPOSURES, NUCLEAR ACCIDENT DOSEMETRY
	° RAD SAFETY TRNG



## AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Ken ClaymanDate: 5/21-25/2007

Personnel Interviewed: _____

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	RADCON
4.5.3(E)	- REV'D: CORR. ACT. PLAN & CAUSAL ANALYSIS FOR
4.5.2(O)	EMERGENCY EXPOSURE SITUATIONS, NUKE ACC.
	DOSIMETRY & RAD SAFETY TRNG (5/10/07)
4.5.1	° DOSIMETRY PROGRAM IS ACCREDITED UNDER DOE LAP
4.5.2(E)	° IS ASSESSED REGULARLY PER 10 CFR 835
	° REV'D: "BNL RADIOLOGICAL NEWS" (1 ST QTR '07,
	4 TH QTR '06) → DISTRIBUTED TO ALL QUALIFIED
	RAD WORKERS
	° REV'D: O+TS STATUS REPORT FOR RCD (THRU
	MARCH '07)
	~~~~~
4.5.1	IH LAB - R. SA WILSON - IH LAB MGR
4.5.3(O)	- CALIB. OF EQPMT - ON-SITE & OFF-SITE
4.5.4(E)	- RESPOND TO REQUESTS TO EQPMT. - E-MAIL OR PHONE
	° COMPUTER SYSTEM BEING ESTABLISHED FOR EQPMT
	REQUESTS
	- INTELLITRAK USED FOR EQPMT INVENTORY MGMT (VIEWED)
	- STAND ALONE COMPUTER
	- DEMONSTRATED CHECKIN/OUT PROCESS
	- PEOPLE MUST BE APPROVED & TRAINED TO CHK-OUT
	EQPMT. (MGR SIGNS OUT EQPMT WHEN SENT
	FOR CALIB.)



AUDIT NOTES

Personnel Interviewed:

[illegible]



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Briana Date: 5/21-25/2007

Personnel Interviewed: EENS Pat Sullivan (Ops Mgr)
Pat Carr (EHSQ)

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	EENS mtg 845 Am Morning staff mtg. (5/24)
4.4.3	Safety score #'s for DART and Recordables
4.5.1	team discussed that making use of
4.5.3	lessons learned is difficult from
	descriptions given.
4.4.3	Traffic violations - discussed trends and
4.4.3	that is shouldn't be an excuse that
	enforcement is more active. if you did it,
	you did it. Zero tolerance.
	Environmental - haz waste sticker discussion.
4.4.6	Discussed getting students on ESR's.
4.4.7	IH - 815 resampling and ether - following
	up on odor experienced yesterday.
4.4.2	EHS Coordinator mtg coming up - looking for
★	Employee relocation - discussion of transfer ^{Agenda} _{ideas}
Noteworthy	Used work permit process to lead discussion
4.4.6	of moving / lifting. Weighed various boxes
4.5.2	of books / files, etc. 20# - 40#. (WP# ^{RD-042407-01})
OSHMS	JTA - New requirement that all need JTA's.
4.4.3	Jeopardy game used for training last week
Noteworthy	with NN Division. Very effective
	Training ^{ISSUES} with student liason group - mtg
	next week.



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: EENS

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	
4.47	Emergency Plans are forwarded to all employees. Memo's regarding new revision sent Bldg 130 (11/29), 475 (11/06), 185 (5/22).
	Drills performed 6/29/06, 7/12/06, 11/14 x2
	Radtec field station drill for chest pain
	Committee for updating the emergency Subject Area. Discussion within Committee included making areas resp. for review report.
	Large Table Top Drill for injury / Next of Kin notification. Issue identified that Peoplesoft data about Next of Kin may be inadequate for next of Kin.
4.5.3	
F/U	→ IS this issue/result shown as an action item or corrective action?
High Level Lab Revamp of EM	→ IS the formation of the EM Subject Area the result of a CAR or previously identified issue? DOE assessment
4.3.1	subject Area DOE Order for revamp of EM Plans
	JRA Cryo (EENS-JRA-004)
	operation of autofill system - Oxygen
	Deficiency Hazard evaluation. Score reduced from 40 - 18 60% reduction
	Severity reduced since operation cannot cause deficient atmosphere.

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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007

Personnel Interviewed: _____

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	JRA (Machine Shop EENS-JRA-002)
	revised 3/22 to clarify controls
	EENS-JRA-018, 3/21/07. Added potential
OHSA	Work in helicopters.
4.3.1	EENS-JRA-027, Neutron Generator 3/16/07
	Added, new JRA, work is off-site.
	(on site work has different weather and
	other conditions).
	FRA-490D, 2/1/07 revised due to
	removing risk altogether.
	Posting lobby Bldg 197 ✓ latest version
4.4.1	Nuclear proliferation division
↑	- office dweller
	interview excellent response for
	policy, recycling programs,
	ergo awareness and training
4.2	-PI policy and operational controls
4.4.3	emergency response - excellent
	response. Jeopardy game was
4.4.6	fun
4.4.7	Interviews: @ LEC / Alt BMgr (PI x 2) Excellent
4.4.3	Bonnie / Admin - gets safety info from respk
	Monday Memo, committee, staff mgs. Good
	policy recall. Good knowledge of importance
	of procedures & safety awareness
	of her risks.

AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: EENS

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Cont. Bld 197 & 490A
	Interviewed 2 PI and Bldg Mgr
4.4.7	Emergency response ✓ fire/injury/shelter ESK process,
	Attended Staff mtg - good discussion of safety
	Review LEP 409A 490A rev. 11/8/06 ENV
	Walkie Talkie / extra batteries
	Excellent coordination with rest of a huge bldg
	General program remarks from
4.3.3	EMS coord & Ops mgr EENS
4.3.4	O+T in line w/ Labwide recommendation
	Safety component to every Monday Staff mtg.
	✓ measurable ✓ yes April Dept Monthly focused on lifting and preparing for move
4.4.6	Work permit written for Lifting boxing, packing & up packing.
4.3.3	CMS inventory reduction funded by S2 AED funded by S2 result of Drill Critique



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Briana Date: 5/21-25/2007Personnel Interviewed: Internal Audit and Oversight (11 people)

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Mark Israel, Mgr
	2 aspects of operations. Conduct assessments for Q, EHS, Conduct of Ops. Verification of actions taken from previous audits.
4.4.1	
4.4.6	Report to BSA / independent of Lab, but line to Sam Aronson.
	Risk prioritization plan for HSE / This is a driver for audit schedule for next fiscal year.
	Proactive review of effectiveness of ISM corrective actions.
	Internal Audits of financial audits.
	→ Issues from Bldg 400 FRA Address in ORE
4.4.6	Worker observations on site or off-site. Report Controls. (ex. WP-552006-167)
	- Assessment Plan includes safety
4.3.1	Talk with department before audit - Noted on JRA-02 for worker observations.
4.3.3	Objectives / Targets (46 - safety training for
4.3.4	Move (2 online and Nicole provided training).
4.3.4	All JRA's reviewed and rev'd back to 0
↓	JRA's include topics like Walking, Worker observation, office tasks.

Noteworthy
Back safety
Proactive

to move
4.3.4

Since new bldg.



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: IA/O and Diversity Office

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Emergency (LEP) training
E	LEP, rev 5/9/07, 5/21/07 training
4.4.5	Records OSH Documents file location list with retention time.
4.4.2	Training records - checked 100% Dept for TO Backsafe
4.4.5	and HP-Move
4.4.1	R2A2's - current / reviewed in FY07
<hr/>	
4.4.7	Diversity office, Manager/Director Ralph R. Bldg representative. Plan for the bldg. Zone 10, Shelter in place and Assembly.
4.4.2	Mtz place 98 ft to egress. Summer intern participated in Emergency training
4.3.1	practiced opening window to get out. Issue pending about window in Rose's office.
H.2	"Safety starts with you."
4.4.3 / 4.3.1	→ Doing all Objectives HR FY07



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Briana Date: 5/21-25/2007Personnel Interviewed: Information Services Division

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Many Peterson, Patricia Flood (Lisa Willi) LEP Bldg Mgr.
4.4.1	Pat EHS Coord. Mtgs and programs briefings. Comes back to organizations.
4.4.2	Yearly Training (Division mtgs) - At least. Envoy for Lab to pass along information about P2. Also the quality rep.
4.4.3	EHS → Quarterly mtg lead by Pat Williams. No significant aspects. April 25 th
4.3.3	FY07 O+T
4.4.7	① Fire Drill. In process to try to get it scheduled, LEC has changed. Emails 5/22 to new LEC to get ball rolling. Shelter-in-place drills remember conducted 2006 (3/24). Assessment by John Searing identified a change for the place. Drill was a practice for the new gathering place.
4.3.1	② Review JRA/FRA. E-mail notification and responses from 5/2/07 and 4/20/07 show evidence of review. No changes so Rev. level same.

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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: Information Technology Division (90)

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Many Lynn Heinrich, OSH POC, Bldg Mgr, ESH, LEC, Recycling. Discussed all these Roles
4.4.1	
4.3.1	Environmental Aspects Lead acid battery banks. Monthly/quarterly telecom. empty can machine. Haz waste takes them. Copy room collection print cartridges, battery
4.4.3	practice to revisit new people 2-3 weeks after to aid in retention and make a personal connection.
4.4.2	→ posted water quality data Water quality Concern: Potable water Study. Discussion about Community Involvement
OSH	
4.3.3	FY07 Objectives and Targets
4.3.4	- identify areas of focus - review BCF (515, 459, 129) - printed Tier I history - team of ~7 to walk thru and review ex memo 5/9/07 re: FRA review → potential to reduce risk
	Discussion of new strokes for hearing impaired
	Mark up copy of FRA-AO-02

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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: ITD

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Discussion about can popper - share
4.3.3	with physics - P2 submittal for this
4.4.1	year.
4.4.1	Emergency Services.
F/U	Emergency Services.
	Evacuation fire alarm B. 515.
	Considered on custodians in critique
4.2	David Cortijo, Computer Tech
4.4.2	Safety hazards. electrical, aware
	of voltage.
4.4.6	Heavy equipment. - avoid anything
	bigger than 20" unit" size.
	Floors, wiring.
	Hardware group moves heavy stuff
4.4.3	Weekly staff mtgs. Safety topics.
	re. cig butts recent topics,



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Briana

Date: 5/21-25/2007

Personnel Interviewed: ITD

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Eric Blum ^(mgr) BCF. Hardware maint. interact with plant engineering, planning of expansion
4.2	Safety. installation and repair lifting/carrying, electrical - class A restriction, Any mainten of cuints, trip/fall, hand tools, hand drill.
4.4.7	Resp. for Fire Evacuation. smoke in area, cut power and call fire department.
4.4.3	Communication - formal training, mgr. comm from Jim T., incident reports, Staff mtg monthly
	Green-sheet for special projects
4.2	Policy ← ^{min.} reduce tox report spills ← Safety first, speak out. Disused Community
4.4.1	

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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name:

Date: 5/21-25/2007

Personnel Interviewed:

ISD / Briana
ITD

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Nov 28, 2006 Memo with responses to Nicole's Ergo Assessment. Ordered new step ladder. Some suggestions they didn't se accept, but they did justify not doing it (use of spatula to separate volumes).
4.4.6	
4.5.1	
	Bldg 454 - ITD
	ITD
4.2	Josh Federmann, system administrator ES&H Policy Coordinator Mary Lynn
	- work planning - look for impacts.
4.4.6	- Safety Data for ladder, lift Assist, electrical panels, slips/falls, wires watch for trips
4.4.3	- communicate w/ Mary Lynn - labeling safety equipment.
	- Bldg Mgr - Jim
	Gathering HR Training room Kitchen
4.2	Ruth Merker - 42 years.
4.4.2	Bulletin Board for policy statement
4.4.6	lifting, ergonomic, mths.
EMS 4.3.3	recycle paper
4.4.2	checked BTMS for ITD, John Peters Deb Bauer to All up date



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: SSD

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Safeguards and Security
4.4.7	- support Emergency by providing
(O)	trained responders
4.4.1	- protective force / first responder
	- for spill / provide support
(E)	
4.4.7	Emergency - Fire / Haz Mat / Ambul
	Spill Clean up.
	Quality Assurance / Rich DeRocher
	Take care of "E" in Ann
4.4.7	Day 2
4.4.3	EM muster, interviews
	PM System. OFI for feedback
	to know if all w/o are closed
4.5.4	PM Pete - lovely w/o files
	Drills - Audit trail regarding frequency
	of evacuation drills.
	PPM - old Haz Com Plan 91
	Tomorrow PE Refrigeration / Az
	HE Heavy Equipment

Motorpool
EENS - IAM



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: SSD

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	How do you assist LEC prepare LEP's.
4.4.2	verify training for LEC ← New facility, also recon for input to response plans Ex can 3 mon before Also Bldg 400 before
	ICS Incident Command System
4.4.6	
4.4.1	inspections of fire protection systems.
4.4.7	
4.4.2	Training Captain Dave Peter, ESSH. Compliance, Community,
4.2	Cont. Improvement Dave Baulch, officer
4.2	Stop Work. Main gate - traffic, range, response.
4.3.1	JRA - all tasks covered by that.
4.4.7	Drills for alarm and response for dress & insecurity alarms. procedures for fire arm
4.4.3	Muster mtg 230pm 4 officers - security plan for Day, announcements - Safety Briefing. Buckets up, assignments. ↳ short



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: EA SSD

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Vehicle inspection sheets, Captain Gilbert (on vacation)
4.5.4	firearm inspections, watched firearm check in
4.4.4	Motorpool "owns" vehicles and sets the service requirements.
(E) 4.4.4	Range use / lead pre/post range operations checklist 5/20/07
4.3.1	JRA's (General Patrol Driving) generating generated in PH3, not up for review again.
	JRA's referenced to SPO - 307, 203, 316, (Firearms Qualifications)
4.4.4	Range Safety procedures - robust procedures for training, qualified people present for range opportunities.



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name:

Briana

Date: 5/21-25/2007

Personnel Interviewed:

Joe Levesque, Fire House (ES)
Acting mgr

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Development of JRA / FRA
4.3.1	duties match mission statement. firefighters had input.
	FRA. Started with Autocad drawing. included mundane office activities
4.4.6	Physical Training - 1-2 hrs per shift
(6) 4.5.3	→ seen reduction
preventive	56 hrs 24 hrs ^{on} / 48 hrs off
4.4.3	Watch Room - radios / communication
	- redundant w/ police monitoring
4.4.3	Chuck Lasalla, Deputy Chief
4.4.6	What are the region LEP?
4.4.6	Indoor Assembly - indoor assembly
✓	Shelter in Place - severe weather - voice over radio systems
	Emergency 911 / 2222
4.4.7	Steady Siren - indoor assembly
	wavbling siren → evacuate → go home
	Fire Alarms - Bldg Specific.



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Briana

Date: 5/21-25/2007

Personnel Interviewed: ES

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	About 30 people 24 firefighters safety briefings prior to drills Certified Safety Officers
4.4.2	Safety briefing - ex. extinguishing training
4.5.3	
4.4.2	Safety Stand down follow that - 3 days One per shift. (to Report of topics covered 2005, 2006 June)
	Fire truck back up alarm - installed in 3 trucks - one more
4.4.6	Example work permit / ISM for Bldg 855 Special project.
4.4.3	Safety items covered during roll call every day - this week govt vehicles past topics traffic, buckle up.
4.4.3	eLog - communication of issues for next shift. events, equipment issues
4.4.2	F+O drives toolbox topics, also word of mouth, news, firefighter website for safety Review it in Roll Call



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Briana Date: 5/21-25/2007Personnel Interviewed: ES

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Drill ALL W/FA Last Week 3 days 5/18/07
4.4.7	Level A suit, practice decon
↓	Training requirements - many certifications required! sending 6/yr to High level Homeland Security
↓	- EMT - live fire training next week
↓	- Firefighter all staff going
↓	- Haz Mat
4.4.6	Barcode - Hydrants quarterly for low risk
one equipment	- extinguishers - monthly for high risk
	- Scott packs on trucks
	downloaded every day
4.4.6	Assignments monthly by plant engineering
	Gary Rider. Firefighter
4.4.2	orientation walk thru all bldg.
New Hire	CBT - Env System -
	Emergency compartment

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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: ES

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Firefighter Roll Call
4.4.3	Engine service, rope knot → more knots, farther away. Watch cycle - 2 during night
4.5.2	example of involvement with construction New Bldg - discussion about credit card entry - memory maxed.
	Greg Myer } Policy ← elements Michael - Hickey }
4.3.1	Back / Muscle strains - work out room - involvement - ergonomic packs
	Training
4.4.6	Work Orders Monthly, Quarterly, yearly Assignments given monthly AEDS, valves, extinguishers, labeling Hazmat, fire hazards Any issues, verbal at end of audit or submit to inspection report - history



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: ES / F+D / AND PPM DIVISION

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Pete Palamidis, PM Pete	* Tidiest w/o file
4.4.6	Fire Group (ORR) about 90 pm & go to EM Emergency Services	
	117 open right now	
	Discussion of Backlog	
	5 # Bldgs in Maximo show open from March	RD/
	4 of these have evidence in Barcode computer that inspections were performed	
	1 missed Bldg 956	
4.2	PPM D	George >
4.4.6		Ron
4.3.3	suspect scrap metal guaranteed.	monthly safety committee
	Shipping Isador Garcia.	- Tier 1
	Receiving. Ex, Shipping/Receiving	Ex. Flammable
	packing list → log into system. CMS	
	Comes to	
	reviewed spill kit → inventory	toolbox mty.

Cautions - Carrying things, chemical



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Briana Date: 5/21-25/2007Personnel Interviewed: ES

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	John Searing
4.4.7	Emergency Preparedness DOE 151.C
	Flows to Subject Area / 8 sections.
	Ties into OHSAS / EMS
	Drills, target to
	Major petroleum spill drill scheduled.
	- Annual Site exercise
	- upcoming work drove likely scenarios
	transportation over turned truck
	Allowed it to play out 3 hrs. / off-
	site notifications.
	- post injury - leg injury / Contract mgmt
	and event reviewed.
	CFM → construction - small FRA
	F+O. Int Integrated program.
	Safeguards and Security-

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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: ~~ETA~~ A Peng. F&O and PPM

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	inspection for fire protection
4.4.5	Barcode 135997, 135999 + (23 total)
posted	E50804 Jags
	New policy
	Storage - Bldg 525 (TR525)
	Standard Static revolving
4.4.5	Inventory posting CMS
	32x18al V Lme-A-way
	9/21/06
	Safety Committee monthly 5/10/07. review FATS
	AT's 1 hour mtg. (12 participants)
4.4.5	Haz Com Program 12/19/91 → removed
	March 1990 Guidebook for Labeling
	Chemical Containers
	Jerry Quigley, Property Specialist
	Computers, send to uncore
	- Scrap metal, small amt of hardware
	- monitors
	- education pool
	Shell recycle, scrap metal goes thru
	Jerry
	Bill Driver →



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianDate: 5/21-25/2007Personnel Interviewed: Refrig / F+O Maintenance / EP

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Joe Craftsman and Joe
	- w/o or PM visit location and
4.5.1	determine if gas recharge
EMS	SCALE - not on CAL schedule but plan does not ref
	Brookhaven Tool Club Bldg 452 (issuing)
	Asset tag A018784 (PPM tag)
4.4.3	Toolbox mtg
4.2	Policy (3 Interview) - good recall
	fluid recovery
4.4.6	Separation of wastes
	and lubrications.
	Damage to environment
	- ozone depletion
	Discuss recovery.
	members of AC Chemical tech news
4.4.3	Pat Browne, CFC regulations (EPA Certificate)
4.2	John - Verified EPA Certificate
4.4.6	Inventory Control
	- pink request BNLF 1134A (old form)
	- Formal Inventory Sheet filled ok
	and logged in log book



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: Rethig F+O / EP

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Safety Glove . six months . red / yellow. Electrical Safety
4.5.1	Job site inspection.
4.4.3	Safety Meeting Minutes posted 4/9/07 Several Safety & EMS topics including wastewater treatment, LD/TO, injuries reviewed, safety equipment & PPE.
4.3.1	Discussion of JRA / FRA updating →
4.4.4	Refrigerant inventory plan Requires out-day six month formal inventory and log of inventory (verified log)
4.5.4	Form for EPA Recovery, records reg., summary of regs All techs trained on plan, 11/21/05
4.5.4	Review Schedule for Plan? (Subject Area?) Yes. Doc control rev 9/30/05



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: Refrg F40 / EP

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	AC / Maintenance Department
	Refrigerant recovery and reuse
4.4.4	recover oils, scrap metal chumpster
4.4.1	oil, tested and burned at Steam plant.
	Internet - procedure. PM "PM Pete" refrig. guru report and scheduled follow up for repairs.
4.4.5	Refrigerant Management Plan rev 1 9/30/05 Jeff Williams, SME for non-rad air emissions.
4.4.2	Today - 10-2 training
4.4.4	ex. WO: EP166736 Follow up check to 4/21/06
4.5.4	EP160135 3/30/06 recharge fix leak
4.4.6	Refrg. storage cylinders and equipment each man has brake / tank / recovery machine
	Joe / John - crafts



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: John Gottlieb F+O HEMO

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Heavy Equipment Mechanic Operations Tour
4.4.3	PPE requirements
4.3.1	MSDS Book - getting reorganized (IH) ^{boxed}
4.4.4	
4.4.5	Static revolving list 2/27/07 (CMS) IH 5720 9/5/06
4.4.6	Oil waste stream - proper disposal.
4.4.6	Aerosol can recovery Binder log shows entries for 05-07.
	Oil storage area. Drums on containment Used oil
(E) 4.3.3	P2. System 1 parts cleaner (No Safety Clean) recharges mineral spirits Only have to add a few gallons per year. - closed
4.5.3	→ CA TB5 reference CATB2, CATB6
(FID)	JRA-EP-HEMO-01 5/8/07
4.4.2	Training req. improvements improvement



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: HEMO / MotorpoolF+D SS

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Procedure for refueling trucks
4.4.6	2 5000 gal tanks 1 10,000 gal tank
	<div style="position: relative;"> <div style="position: absolute; top: 0; right: 0; transform: rotate(-15deg); border: 1px solid black; padding: 5px;"> Ergonomics Prevent lifts for small equipment in heat Jobsite injury </div> <div style="position: absolute; left: 0; top: 50%; transform: translateY(-50%);"> Tank 1 } meters w/ gallons Tank 2 } Tank 3 } </div> </div>
4.5.3	Noticed that Tank Meter was off of the stick measurement, repairing. Good corrective preventive action
4.4.6	Water collection. Calls Peter to inspect water prior to pumping to swell no sheen
	Biodiesel pilot with 1000 gal tank. Look at performance. B20 / B5 cold for year. Goal to replace one of tanks with it.
	Same as satellite boilers - using biodiesel veg. oil when possible.
4.5.1	Tank Certs - Inspections yearly



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHS ReassessmentAuditor Name: BrianaDate: 5/21-25/2007Personnel Interviewed: F+O Motorpool SS

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Hank	Peter Pohl - spill
	Rich Allingham	Beeper; P2 initiatives for F+O.
4.4.7	Fire Extinguisher	011630 (Barcodes)
		015981
	ext com	
4.4.3	P2 Suffolk Cty got advice from them for P2.	
	Re-refined Oil - bulk shipment	
	Discussion of Hydraulic lifts, lines were under roof, retrofit seals converted to Biobased hydraulic	
	2 years ago - Rupture of line - Biobased	12
	until this year again.	12
	Attempt to put into next year's budget.	
	Added hearing protection	
	JRA/FRA Peter helped them.	
	higher risk area. inclement weather	
	Tow Truck operation	

good preventive measures
E 4/5/07

F+O
good

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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) – EMS/OSHMS Reassessment

Auditor Name:

Gordon

Date: 5/21-25/2007

Personnel Interviewed:

Stephen Ferrone

John Peters

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Introduction to BNL
	Performance Evaluation & Measurement Plan
→	? How are Directories evaluated to
4.34	assure they have done an appropriate evaluation of PEMP, aspects & hazard risk
4.3.1	Aspects reviewed annually
4.3.5/4.3.4	Now lets audit each other
	Weighted objectives
4.4.3	
→	Contractor communication & control
4.4.6	JRA
	Work Permit
	Experimental
	FRA
→	Standard with site specific adjustments reviewed every three years, 1/3 every year



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Gordon

Date: 5/21-25/2007

Personnel Interviewed: Beth Schwaner Training Manager 7 years

In left-hand column, note the element that was assessed and any secondary element that was assessed.

22585

Element #	J.P. Ascotti Fred Horn
4.4.2/4.4.2	B T M S Brookhaven Training Management System
	EM EP 117 required every 30 mo
	Line Supervisor
→	JTA assigned & reviewed annually
4.4.1	Training Coordinators for each directorate
4.5.3/4.5.3	Training records and needs assessment
	Tasy
	BNL
4.4.2/4.4.6	Resident Contractors training needs identified by Supervisor
	ERP ERP Directorate Records
	William Needrith ERP Waste Management
	expired 8/24/06



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Gordon Date: 5/21-25/2007

Personnel Interviewed: _____

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	
4.4.2	Jernigan, Thomas ERP/Contractor Contractor
4.5.3/4.5.4	Several missing training eg. Fall Protection 9/30/06
	Thomas Doyle
	Lock Out Tag Out 3/25/07
	Radioactive Materials 3/18
	Hazwoper 2/11/06
	Life Sciences Directorate
	Mario Moscarillo Okay
	John Lave Okay
	Richard Sautkulicz Okay
	Criteria for determining job qualifications Requirements - guides training



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Gordon

Date: 5/21-25/2007

Personnel Interviewed: Ann Enrick Stephen Bob Celichro

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Life Sciences Directorate
	Malmed \Rightarrow Brown
4.4.16	Experimental Safety Process
4.5.3	1st Objective Zero non conformance
4.5.1	IA total on 3 year cycle
4.5.5	audits conducted annually
4.5.2	Lessons learned Positive practice
4.5.3	Plant engineering
4.5.2	Occurrence Report SC BHSO-BNL-2006-014
4.5.3	Sparkler / Electric Open 8/24/06 - 9/29/06
POS	Lessons learned JS-2007-01
4.4.3	MO-2005-01
4.5.2	Critique Summary
4.7.3	Good targets
	Traffic safety improvement
	Reducing legacy wait



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: GordonDate: 5/21-25/2007Personnel Interviewed: Life Sciences Directorate Continue

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Aspects
9.3.3	LS- EMSA Rev 16 12/28/06
4.4.4	EMS Management System
	Life Science OSHAS 18001 Rev 1 10/6/2006
4.3.3	Aspects reviewed annually
	Interviews
4.2	Byron Junker / Yory Schuender
4.3.1	Thomas Langdon
4.4.1	
4.4.2	
4.4.3	Rich Sautulis Bldg Mgr, EC, Greenhouse
4.4.5	
4.4.4	
4.4.7	
X	Emergency - Site wide system that they participate in
4.4.2	No facility review of results
X	BNL Fire/Rescue Group #52482 1/13/06
	WCF 89195
4.4.6	Non-Radioactive Waste Control Form
	Auto 86 Goes to 866 Leo Palumbo
	Leo recaves 5/23/07 Plan of Work every 70 days
	91 Haz Waste Accumulation Area Weekly
	Inspection Checklist for 3 months all gen
	Mixed waste 1/19 - 5/14 ok

Lois Moller - inputs form into system
 bar codes file original → copy to staff for disposal management



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Gordon

Date: 5/21-25/2007

Personnel Interviewed: Rich Ferrieri - Supervisor Ops P.E.T.

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Life Sciences Directorial
	Nuclear & Radiochem Summer School
	Controls in place → Not Not audited
	School is not in session
	Medical Dept
4.6	MR 9/25/05
4.2	Michiko Miura Chemist 20 year
4.3.1	wasn't sure what a JRA was
4.3.3	
4.4.1	Haz waste drum 5/2/07 - Okay for 90 day
4.4.2	
4.4.5	90 day Mixed Waste 4/2/07 - 5/18/07
4.4.6	Itan 1/9/07 - 5/18/07
4.4.7	
	Bob Colickio
	Jong Schwender Ag Supervisor
	Joachim Louien



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Gordon

Date: 5/21-25/2007

Personnel Interviewed: _____

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Life Sciences Directorate Final
4.5.4	DA report 3/12/07 Robert Selvey, David Skipper
4.5.5	Nicole Benhok
4.5.6	audit schedule - in
✓	Life Sciences FY07 Self assessment plan
<hr/>	
	ERAP Directorate (Environmental Restoration Program)
	Bruce Lein Training
	Brian Heneveld OSHR
	Keith Klaus EMS & Env Compliance
	Joe Montalto QC
4.6	Management Review Minutes 9/21/06
*	Policy?
	Memo October 12,
4.4.6	Work Instruction - Access the Below Ground
plan	Ducts to Obtain Beryllium Wipe Sample
	ERP-JRA - S&M-021 5/3/07 SRC Approval
	Beryllium Sampling Plan 3/21/07 5/14/07
✓	Daily Safety Meeting Form 5/16/07
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Bob Selvey sign off on Equivalence	
RUB MR 9/24/06	

Answers
Training
Issue
from
Monday
5/21/07



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Gordon Date: 5/21-25/2007

Personnel Interviewed: _____

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	HP-IHP-75505 5/16/07
4.5.2/4.5.3	ERP Corrective Action Program & Conditioning Reporting System
	ERP OPM-2.2 Rev 1 2/01/07
	Assessable Root Cause OPI
	Condition Report ERP-07-33
	Les Hill
4.4.6	Implementing STOP Program Variation 4/30/03
	4.7 Safety Observations ERP-OPM 4.7 Rev 0
	Bruce Training LEC
4.4.7	5. BGRR Local Emergency Plan
	EP
→ x	No evacuation drills - part of site plan
	Site Plan does not include
	Plans for uninit drills & cleanup process will result in modifications of access & egress
4.3.3	OHs FY 2007 Objectives & Targets
	4/2/07



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Gordon

Date: 5/21-25/2007

Personnel Interviewed: _____

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	ERP Directorate
4.4.7	ER SIP 9/23/05 → no data 9/29/06 → saved
↓	Site Emergency Preparedness 5/15/03
<hr/>	
	Counter Intelligence Office
	Randy Biegelman Senior Counter Off
	Helen Tudowson Analysis
4.3.3	
4.3.4	→ Continual Improvement - Handrails
4.4.6	CI Office TRA Priority List
	Rev 1 9/19/06
4.3.3	OTIS 5/18/07
4.5.3	HRS Records Management System 6/12/06
4.4.6	TRA 04 Business Travel to Underdeveloped
4.3.3	Counts → parts not recalculated after controls

Followed up - Two no recalculated not entered because
of control eliminated activity



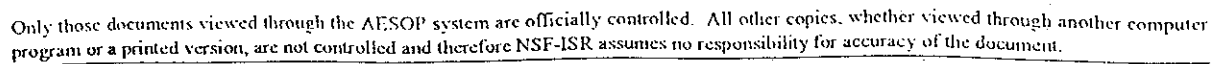
AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Gordon Date: 5/21-25/2007

Personnel Interviewed: _____

In left-hand column, note the element that was assessed and any secondary element that was assessed.

4.4.6	Linda Sinatra Mgr of Foreign Travel Foreign Travel Management System email automatically alerts for CE briefing
<hr/>	
	Physics Directorate
	Ron Gill
	Mike Zarcone
	John Peters
4.4.7	DO-LEP-01 Rev 4.1 11/14/06 Local Emergency Plan
→	John Seering = EMP Test results
4.3.1	Aspart PG 2007-011 reviewed 4/9/07 signed Review PG 2006-011 4/12/07 Version 011
4.3.3	FSR ERS Form 4.1 (2006) life + reviewed



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) – EMS/OSHMS Reassessment

Auditor Name: Gordon Date: 5/21-25/2007

Personnel Interviewed: _____

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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Gordon

Date: 5/21-25/2007

Personnel Interviewed:

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Instrumentation Division
	Robert DiNardo
4.46	Activity Safety Review a 50 people
4.1 / 4.44	ESH Management System 3/1/07 Rev C
4.4.6	10 TRA 05 10/31/05 / 1/3 of TRAs 10 VRA 15 8/31/05 / not 10 VRA 08 8/30/05
	Activity Risk Analysis linked with PRA & Significant
4.1.6	Management Review
Pos	Reduction of na haz waste over several years
?	MR after BNL MR O&T Electronics Recycling Goals are met

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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) – EMS/OSHMS Reassessment

Auditor Name: Gordon Date: 5/21-25/2007

Personnel Interviewed: Instrumentation Division

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	MR 14 Dec 06 minutes and
4.1.6	Presented Presentation
4.4.1	Veljko Radetka Division Head
4.4.2	44 years of lab
	35 Division
4.4.5	Dr Graham Smith Line Mgr Gas Liquid
4.4.6	detector
	- Follow up - evidence of review + update of JRA's
4.4.6	ASR 08 Gas & liquid sensors
	ASR 13 set 90 day accumulation
	alarm
	3/13/07
IA	How to prove complete



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: GordonDate: 5/21-25/2007Personnel Interviewed: Finance Directorate

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	April Gray Administrator Finance Specialist 33 y/o LC
4.3.3	OS Rep
Due 4/10/07	2007 Obj. OSH Management Plan Finance Directorate
	Obj. FRA's & JRA's for TFCU Teachers Follow Credit Union
4.1	OSH Management System Rev 0 4/8/06
4.4.4	
4.4.6	JRA Office Work Rev 1 3/07
4.1	POS Moving Tips
4.3.1	No significant aspects
4.2	Joanne Ciancone
4.3.3	
4.4.1	Fred Benjamin Acct
4.4.2	
4.4.3	Barbara Vulcano Contract Pay 14 y/o
4.4.5	
4.4.6	Charlotte Back Payroll 14 years
4.7	

next page



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: GordonDate: 5/21-25/2007

Personnel Interviewed: _____

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Cynthia Von Gerichten
↓	Richard Melucci Budget Officer 12 years
↓	Monthly walk around
↓	Maureen McDonnell Budget Analyst 16 years
↓	4.4.7 —
	Occupational Health Division
	Terry Mangeri Senior Administrator
4.3.3/4.3.3	Occ Med Clinic FY 2007 Objectives + Targets Rev 0 5/19/07
	OAT Forms are redundant to
	Self Assessment 1/24/07 Sept 22 2006
4.6	MR 9/22/07



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Gordon

Date: 5/21-25/2007

Personnel Interviewed:

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	CAR/PAAR
4.5.2/4.5.3	BOSH 4
4.4.1	Or Falco
4.3.3	DART Targets to go into OHSAS
	HUMAN RESOURCES
4.2	Donna Dowling Labor Relations
4.3.3	DBEW
4.3.3	Safety
4.4.1	Letts Louisa Barone Senior Human Resources Mgr
4.4.2	
4.4.3	Chair of Safety Comm
4.4.5	been in process
4.4.6	
4.4.7	HRO M Safety Meeting Minutes 4/30/2007
	Responses from Management are positive & timely
	1/4 h, Tier 1 reports 12/1/2006 4/2/07
	Liz Gilbert

POS - Management very responsive to Safety Committee



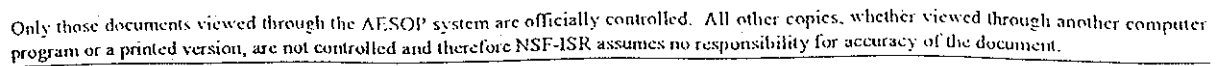
AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: GordonDate: 5/24-25/2007Personnel Interviewed: Mike Fury Doug Ports

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	Intellectual Property & Sponsored Research / ^{Integrated} Planning
4.4.6	NF -07-16 Information Questionnaire ^{4/5/07} 4/5/07
↓	Memo & NEPA 4/10/07 from Mike Fury Memo from Davis 4/15/07
4.3.3	Objectives & Targets 5/12/07
4.4.4	Relocation Plans & Safety Discussions 5/8/07
4.5.1	Work Space Inspection 5/21/07
4.4.4	JRA - Office Work 10/31/06
↓	Facility Use Agreement Bldg 185 June 2007 FUA - 185-2000-04-1
4.5.1	Building 460 E&H Inspection Deficiency Log 5/21
Pos	Noteworthy - move planning because of other move planning

R2 #2 Doug Ports 17248 Michael Fury 18612

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Organization Name: Brookhaven National Lab (FRS #69525 & 69528) – EMS/OSHMS Reassessment

Auditor Name: Gordon Date: 5/21-25/2007

Personnel Interviewed: _____

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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Dawn Henderlight Date: 5/21-25/2007

Personnel Interviewed: Debbie, Steve, John

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	SBMS - Std. Based mgt. system -
	Institutional vs. Directorate:
	a. Directorate has safety & health
	Flu ✓ OHSAS 18001 - PEMP's → facilities assessment
1/308 → 4.3.1	4.3.1 - JRA's + FRA's → "work planning"
4.3.1	1) work permit (task) + 2) experimental (review) -
4.3.2	PEMP) Performance Evaluation & Measurement Plan
✓	Plu → Applicability of PEMP to Directorate
	Flu 4.4.3 - ROD from State regarding CAP inspections
	4.4.1 Pat Williams - OHS Rep/Appointee -
Flu Briana in gas station	4.4.6 Contractors (Transportation, Disposal, Cafeteria)
	→ F+O - facilities + operation
	BBS - Looking at performance factors vs. behavior -
	4.3.1 Propane, ntl. gas (winter) -
→ 4.3.2	EMS - John Silva - Env.
	OHS - Bob Selvey - Mgr. IIT
	+ SPDES permit



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment
 Auditor Name: Dawn Henderlight Date: 5/21-25/2007
 Personnel Interviewed: -

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	SBMS - Bob Henderlight ^{Lee}
4.3.2	ROD - How to comply w/ regulation for EM projects (in ROD - mgt review)
	* SPCC → updated Facility Plan - ^{response} 8/06 40 CFR part 112
	5/16/07
4.3.2	* BNA - 2/mth - Δ - PM 2.5 steam plant
	* Exec. 13423 ^{Energy} water
4.3.2	* State Register - Hard Copy - ie Non-Attachment ENV-4306-0008 - mgt. Subject
	* Requirements Area
4.3.1	* ESR - experimental safety review form captures non-significant
4.5.2	Annual Summary 2005 - Site Env. Report - Mgt. Review meeting minutes - ROD NBPT - chapt. 2 ie. Mercury Reduction - removed 40% active Hg - ^{published 9/0}

4.4.3 Compliance Corner - publication



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Dawn HenderhightDate: 5/21-25/2007Personnel Interviewed: Bob Selvey, Steve Kane

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	
4.3.2	Safety + Health → RPD for changes
4.5.2	
	Interim procedures for JRA
	(enter in SBMS in 12/07)
4.3.2	18 for I H: ✓ * Accelerator [Facility Safety]
4.4.6.1)	asbestos → * Safety [Rad -]
2)	Beryllium examples Ken's notes -
3)	Lead ✓ Radcon Chuck Schaefer
closed OFF	Reg. Reg. on web page - not now -
W.	Freq. of reg. review for Safety, not started
4.3.2	MANCOM - Safety updates
4.3.4	Sampled - 34SD JRA - 04 Perchlorate Sampling
4.4.6	and Lab Analysis

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~~Day~~ \$

Auditor Name:

"Dawn - Henderlight"

Date: 5/21-25/2007

Personnel Interviewed: Pat Williams - Director SHSD

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	
✓/u	851.23 - Safety + Health Annual req. - pressure safety - updated on a to meet 851 - current - Gap analysis completed → updated → bringing in ASME SME for "consensus"
✓/u	"Control" - OPI - Master list created; → will add to procedure
✓/OPI	OHSAS 18001 Docs + Records maintained by JHSD - web pg. - Library + Bobs Mancon - DOT shipping table



Day 2
Office of
educ. program

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) – EMS/OSHMS Reassessment

Dawn Henderlight

Date: 5/21-25/2007

Personnel Interviewed:

CBGPA Comm. Education, Govt. + Public Affairs
L. Marge Lynch

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	
4.3.1	H+S risk → 1) working outside - heat stress ticks 2) IAQ (HEPA filters + VOC-low)
4.4.6	SOP'S - pH adj. - step 3.0 PAF
4.5.2	Tier I ^{performance} reports - integrate into Safety - Production -
4.2	1) Policy Awareness
4.5.1	2) Injury (Incident reporting) -
4.3.2	3) 40 CFR 850 851 - plan 9/30/07
4.3.3	4) OPA - Improve ↔ TEMP - lab wide
4.5.2	Reviewed: inc log → daily usage (lbs), Reuse, Waste 2) Foamt Solat → old - Emerald; new - Alcohol ↳ waiting on new press - (Congressional order - Joint Comm.)



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Dawn Henderlight Date: 5/21-25/2007Personnel Interviewed: Aleah Jackson, Mona Rowe, Fred Horn

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	CEGPA - (Rick - via phone)
4.4.3	External Comm - Internal Comm -
	Support Group -
I	Emphasize - face to face communication -
	↳ staff
E	4.3.1 Recycled Paper -
HHS	4.3.1 Pinch points drills chemicals
	ink → rubber bagged to soy inks → recycle
4.3.4	alcohol → fount solution changed → wash out
	via MSDS review
	noise → folding machine
	wet → digital (laser - OK enclosed) -
	Haz waste - cHazCom -
	Recycle "plates" aluminum
	ERGO - Graphics employees
	Bio Haz (outside work) - JRA
	Printers - chemical/cuts - incident report
	Lighting - OK (blinds for sun - graphic designer)
	HEPA filters change out → solid waste
	↳ plant
	Ink waste → industrial waste; reuse -
	VOC Log fount soln; ink



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Day 2



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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment
 Auditor Name: Dawn Henderlight Date: 5/21-25/2007
 Personnel Interviewed: Marge, Jean

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	
4.4.3	Ext. Comm - Inquiries:
*	EPA - NY state Dept of Health - wkly -
*	NY DEC -
*	CCTS - Commitment Tracking System -
	Reviewed examples - Direction, orders
	Goes to responsible to ALD → ESH+Q or
	Head of Operations or Head of Comm
	Open / closed - Pam Yerry - no missed dates
4.4.3	Employee meetings -
4.4	very involved -
4.4.1	DOE / SI, C - Emergency Notification -
SBMS Branch	Drills - Public Int. Officer Trng -
PLA	Commun. Center → 1 st responders
4.4.3	SHSD Directorate -
	WOSH -
4.4.3	Monday Memo -
	PGA Safety Committee -



Day 2



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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Dawn Henderlight Date: 5/21-25/2007

Personnel Interviewed: Marge, Fred, Jeanne, Debbie

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	
	Marge -
	Jeanne - Community Relations
4.4.3	Ext. Comm -
	example - Tours → Ribbon Cutting -
	Nano-science demonstrated -
✓ FIVE	Incident Assessment Plan -
	employee involvement -
	Regulators
	Civic Organiz:
	✓ LAB responsible
4.6	1) DOE / Brookhaven Comm Advisory Council
Lab Director	2) Safety Fed/State/Local Exec. Round Table -
Appendix	9yr. Anniversary - w. clean up of Peconic River
	w. wells & monitoring; HI-Flux Beam Reactor -
	→ EIA & SQ
*	NEPT -
*	P ₂ -
*	Students - summer intern - orientation, safety
	bike safety → JRA
	New Bldg - FRA:
	1) Fire/Evac 3) Alarm signs
	2) shelter in place 4) Bldg access

Dab/fred
Rick/moma
Scott
Neal
marge
Gzan

2006 Annual Report Bob Lee

Day 2 S & L

CEGPA - Verbal - signage for eye protect

1) OFI - Safety Procedure for id. of legal + other to define freq. of review + ROD process, Steve Krane

✓ 2) OFI - CEGPA JRA for PG Cutter was revised as result of an incident - new ops control added but risk rating did not change. Document evidence of change (espec. if doesn't reduce risk) and to show full SOP review - in event other risk changed cross

3) OFI - JRA reference/linkage to SBMS OPS control for employee knowledge of legal req. + safe work practice. Follow ups - (... OFI - JRA about controls)

1) mon - Aspects id. that are not sign. - yes - addressed through PAF - Perf. Assess. form + ESR - Experimental Safety Review (noted as an on the form)

2) Tues - Doc Control of ext. generated docs - ANSI / ASTM / CGA - S+H Library

G.P

1) Tracking of ext. communications + internal mon. memos

2) Integration / consolidation of Tier I reports for timely closure

3) Incident Action Plan for Ribbon Cutting OK ~~it~~ into SBMS

4) New Std. Prig. conducted

Is there a deadline for Safety SOP's to be

Completed - 9 -> SBMS cross work - 7

300

Day 1 6 of 6

SHSD

O/T - 4

2)

1 - Doc Control
Records mgmt

2 - reg. mgmt.

3 - Improvement & completing
actions assigned in ATS

4 - O - 4/26/07

T - 6/30/07 -

45 w/ current
to controls

LT

1) For SHSD not in O/T bel.
thru all belong to SHSD -
owners for OSH { SITE PEMS
SITE OSH Obj.
Track in self.
assessment plans

JRA - SHSD - 01 FY 06

830+801 Jsp

only 1 HEPA filter change
out - (not being used)

100'

DOE 0151.1

4.4.7

John
Seering

~~A C I~~ 4.3.1
=> ASSESSMENT ... w/out controls -



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Dawn HenderlightDate: 5/21-25/2007Personnel Interviewed: BESD - Basic Energy Sciences

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	BNL website → BESD → ESH/Operations
4.6	Presentation from Mgt. Review (slides)
#1	BES E/S Scope:
4.3.1	1) CFN staff + Jumpstart * users (via proposal approval, use BNL equipment) will follow E/S ms of BNL
	2) CFN Prog. will follow BES E/S ms
	3) BES Bldg. 510 (physics) follow Phys. program MECHANICS: SAF Reviewed annually
4.4.6	#2 JRA's supported ESR identified haz + controls
	CMPMJD use matrix for linking
	Review freq? Lab 1/3yr
4.4.3	#3 Communications:
	• New employee briefing
	• Dept. all-hands
	✓ OSH/EMS O+T has been distributed via email
	✓ Ortho safety Comm meeting - F/U + charts
	• Periodic safety mtg.
	• Ortho ESH Coord. meeting - F/U meeting min
433	PMP's
	O/T developed from - ESR's Tier I Labwide
	→ is Gallium Chloride + F/U 'Tank' in Chemistry
	JRA (1) cryogenics, (2) electrical, (3) chemical, compressed gases

Critical tasks

pg. 2



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FLY ESH inspections
SBMS reg root cause analysis

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AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment

Auditor Name: Dawn Henderlight

Date: 5/21-25/2007

Personnel Interviewed: BESD - Basic Energy Sciences

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	
4.4.6	Gallium Tank - NM regulated - Tank inspections flu records - monthly
4.4.7	Hooked to fire Dept
4.4.3	ESH (Both ESH + IHS) :
GP	Review based on: change in reg - i.e. ARC Flash NTPA TO std. ② change based on incident ③ step omitted - glass blower - chemistry
	CHEMISTRY: ESR primary document, JRA support "in process"
	PHYSICS: Integrated ESR + JRA
new	SBMS Electrical Safety requirement (previously ESH std.)
4.5.1	How are NM identified?
4.5.2	Near Miss - example - grounding / electrical - Occurrence Report (Category #3 + 4 - near miss) - Root Cause analysis (Tier I - review why) - ORNL ORP - lessons learned - FRAOS - operating today areas - Mgt Observ. - Nanocenter - proactive - planning on future
4.5.2	DEC inspections - no violations 1 finding on handling / labeling nano-waste - labeled Har non har

Day 3

3 of 5

I.

Safety & Env. Safeguards - each step defined

4.3.1 ESR:

- 1) Secondary containment
 - 2) caps for air excursion
 - 3) HEPA filter
 - 4) annual est. of waste generated. \Rightarrow marked container
- Sect. C P² \approx 4 liter generated to date

4.4.6 chemical storage:

- 1) Reagents
- 2) Flammables

4.4.6 Collecting II. Crystal metals -

- 1) Acid Etching - avoid sewer -
- 2) waste collection in hood.
- 3) do not use powder -

4.4.6 ✓ PPE - chemical + test

4.4.6 ✓ Torch - goggles - eyes.

Signature on File
 John Taylor, EMS Rep

Approved by:
 John Taylor, EMS Rep

1500 Signers 7/11/06

Basic Energy Sciences Directorate
 EMS Aspects Matrix

* back door

3) Signage for no drain to POTW

not pouring into drain

insp 5/21/07

Good - out of service

SAF 17 Sat - accu area

rules posting

2) Good - out of service

ENVIRONMENTAL ASPECTS																		
ACTIVITY DESCRIPTION	ENVIRONMENTAL ASPECTS																	
	Regulated Industrial Waste	Hazardous Waste	Radioactive Waste	Mixed Waste	Regulated Medical Waste	Atmospheric Discharges	Liquid Discharges	Chemical Storage/Use	Radioactive Materials Storage/Use	Water Consumption	Power Consumption	Historical Monuments / Cultural Resources	Species and Sensitive Habitats	Env. Noise	Historical Contamination	Soil Activation	Other Compliance Requirements	Comments
Title	Number	Material Sciences																
4.3.1 EXPERIMENTAL RESEARCH PROJECTS	Experimental Research Projects																	All aspects do not correlate to each experiment. Specific aspects associated with each experiment are identified in the ESR database.
	Metallurgy Laboratory	208	a	a														
	Photography Developing Operation	598	a	a														
	Staff Shop	599	a	a														
SMALL SCALE GLASSWARE CLEANING OPERATIONS	Small Scale Glassware Cleaning Operations	600		a														All aspects do not correlate to each experiment. Specific aspects associated with each experiment are identified in the ESRs and on the CO Department's ESR specific aspect spreadsheet. Rad air emission decayed in storage prior to release. SCDHS Article 12 - Source storage tubes. Part of BNL site-wide Title V CAA permit (labhood exempt)
	Vacuum System Maintenance	212	a															
Chemistry Department																		
EXPERIMENTAL RESEARCH PROJECTS	Experimental Research Projects	Various	a	a	a	a	b	b	a,f	a,e,f								All aspects do not correlate to each experiment. Specific aspects associated with each experiment are identified in the ESRs and on the CO Department's ESR specific aspect spreadsheet. Rad air emission decayed in storage prior to release. SCDHS Article 12 - Source storage tubes. Part of BNL site-wide Title V CAA permit (labhood exempt)
	Glassware Cleaning Rooms Bldg 555	139	a	a														
STAFF SHOPS, BLDG 555	Staff Shops, Bldg 555	140	a															Rags (industrial waste) ✓ Rags (industrial waste), many chemicals, Universal waste batteries None
	Chemical Storage Stockroom, Bldg 555	141	a	a														
WATER DISTILLATION, BLDG 555	Water Distillation, Bldg 555	142																Slivering process and etching discontinued PCBs-contaminated hoods & acid glasswashing area- Ga tanks in 555 basement
	Glass Shop, Bldg 555	143																
SITE-WIDE DISPOSITION (LEGACY) ISSUES	Site-wide disposition (legacy) Issues	n/a	a						a,f			a						
Both Departments																		
ADMINISTRATION/PAPER STUDIES	Administration/Paper Studies										X	X						

Note: If the aspect is not present, leave the cell blank. If the aspect is present but does not meet the significance criteria listed in the exhibit, "Criteria for Significant Environmental Aspects," put an "x" in the cell. If the aspect meets one or more of the significance criteria listed in the exhibit, enter the letter designation for the applicable criteria in the cell.

Reviewed by:

- D. Bauer
- R. Sabatini
- D. Cabell

*Process Assessment Form ID or other organization reference number

Interview: Arnie Moordenaar - visitors / students must participate in work planning -

→ organics / inorganics / acids / bases - 4.4.6 chemical segregation

Chrysler w/ Oct.

4 085

Chemistry Bldg

Day 3 5 of 5

Spill Prevention Report
for Storage & Handling
of Bulk Chemicals for CDS Faculty

4.5.4 (5 yr) - 7/27/04 Dick's copy
Tank # 555-01 Gallium Trn

4.5.4 5 yr. inspection records - State check

4.5.4 Checklist - AST inspections
4/27/07 - visual -

4.4.3 Green Boards ✓
Interviewed Melissa - Joe - CPR cert.

m - JRA 10 - Ladder, electrical, oxygen, compressed gas
for experiment High voltage (no nano detected)
4.4.6 > Fire CO 7-2 ESR Refers to 3 JRA's + 3 FRA's
4.4.2 >

4.4.6 > Laser safety (goggles)
4.4.2

4.4.2 < * Working Alone policy
* General Safety practices



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS ReassessmentAuditor Name: Dawn Henderlight Date: 5/21-25/2007Personnel Interviewed: NSLS - NM. Synchrotron light sources

In left-hand column, note the element that was assessed and any secondary element that was assessed.

★ overview	Element #	Bobs <u>Light Source I</u>
		Nick
		Steve Chris
		Andrew
		X ray ring > accelerate UV ring ≈ 65 beams) ≈ 2100 users)
4.3.1		SEA: waste, chemical storage, lig. discharge + air discharge -
		PAFs -
4.3.1		38 JRA'S, 2 FRA'S - ↳ worker qualification + work planning ES&H Improvement committee
4.3.4	★	Light Source '2' - new program: ↳ OHSAS/EMS in place by end of year Bob - Mgt. Rep. 1) NEPA study complete 2) Reviewed w/ NY DEC + Suffolk Co. ✓ PRM 13.6 - Work Planning + Control (SBMS) at this time 1 SRA for office work

LS: EMS-002



AUDIT NOTES

Organization Name: Brookhaven National Lab (FRS #69525 & 69528) - EMS/OSHMS Reassessment
 Auditor Name: Dawn Henderlight Date: 5/21-25/2007
 Personnel Interviewed: NSLS

In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	ie. Electrical mat. - most SEA
4.3.1	oil(s), solvent(s), liq. discharge
	no longer PCB's - "some" lead solder
	Revised PAF - due this year
4.3.3A	P2 Opportunities (note worthy practice):
	1) neutralization of rgt - lime (regeneration of water sys)
	2) collect scrap metal → recycled
	3) alkaline batteries -
4.5.2 FNU	Peter Pohl - alkaline batteries - no longer haz - go to Landfill - permission from local landfil.
4.4.6	LPS Precision Cleaner - surfactant based.
	corrosives haz photographic waste, ignitables
4.5.1	charts to review waste streams & determine what will be focus (waste classes) -
4.3.3.	O/T - BSH+ Improvement Plan - (4)
	reviewed on line -

NSF

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AUDIT NOTES

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In left-hand column, note the element that was assessed and any secondary element that was assessed.

Element #	
	Walk through
4.4.4	Maps posted for chemical storage
4.4.6	90 day area -
4.5.4	Waste Inspection Log - weekly
	keep for 1 yr - John's office
4.3.3	4.4.6
	haz - lead solids -
	used oil - burn -
	aerosols - haz drum, bonded, spl. lid -
	permits
	Good signage -
4.5.1	ATS - O/T
4.5.2	Tracking Tier I: Qty of exp. / Ann. of office
	D-base / Query experimental area
4.4.7	NSLS - Annual - 10/3/06
	report 2/07 Bob Kitts Bldg. mgr
	toxic gas - Nitroak oxide
	2 recommendations -
	C.A Plan -> ATS # 3567

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4.5.1 action item not closed -

4.5.1 4th not closed

over title of
Her in ATS -
So user knows topic
instead of opening
all of them).

Prepared by Andrew Ackerman
01/26/2007

✓ Enhanced work planning
↳ FRA (Committee)
ESR ⇒ Safety Approval Forms -

- b. Assure completion and documentation of at least one hour of observation time each month for all personnel in the program. Report quarterly to the NSLS Operations Council.

Responsibility: Ackerman

Due date: ongoing and ending on 09/28/2007

✓ Ekp. Reviews by ops

4.4.3 - Safety moments - ISM 1st 5 min.

OTHER DEPARTMENT TARGETS FOR 2007

4.3.3 + CMS/OTB

4.3.4 - OCB

- 1) Evaluate the NSLS Lab Steward program for wet chemistry labs and revise responsibilities and authorities as needed.

Background: Management of the NSLS set-up laboratories is variable and expectations are not well defined. Review and revision of the set-up laboratory steward R2A2's is needed to define what is expected from personnel with that title. Emphasis on set-up laboratory work planning, housekeeping, and organized use through improvement of the laboratory steward program will reduce the risks associated with work in these locations.

- a. Revise the R2A2 for NSLS Laboratory Stewards.

Responsibility: Ackerman

Due date: 02/09/2007

- b. Generate a list of the existing NSLS Laboratory Stewards with identification of assigned laboratory and email address.

Responsibility: Chmiel

Due date: 02/09/2007

- c. Meet with the Laboratory Stewards at least four times throughout the year to discuss and emphasize requirements.

Responsibility: Chmiel

Due date: 09/28/2007

- d. Evaluate and report on compliance with the expectations defined in the revised Laboratory Steward R2A2's.

Responsibility: Chmiel

Due date: 06/01/2007

- 2) Evaluate the BNL Interim Procedure for handling nano-materials and bring the NSLS into compliance with the rules determined applicable.

Background: Work with nano-materials is progressing at the NSLS. The risks associated with these materials are not well defined. BNL, along with personnel from the other four national laboratories that are building nano-science centers, has issued an interim

Day 4

pg 5 of 5

Prepared by Andrew Ackerman
01/26/2007

* Staff - solvent (Chloroform)
spreading (de minimus 875 - 10 min
exp)

* utility workers to be monitored
or weather related delay -
extended - (noise)

4.3.3 OHS/CMS
4.3.4 OHS

Responsibility: Weilandics
Due date: 05/01/2007

- b. Complete representative solvent exposure IH sampling for three separate solvent uses.

Responsibility: Weilandics
Due date: 05/01/2007

- c. Issue noise and solvent exposure risk assessment reports that include the type of monitoring conducted, monitoring results, and recommendations for needed policy and practice changes.

Responsibility: Weilandics
Due date: 06/01/2007

- d. Revise NSLS policies for working with solvents and in noise areas to address any recommendations that arise from exposure risk assessment reports.

Responsibility: Gmur
Due date: 08/01/2007

3) Accelerate implementation of NRTL program and complete inspection of 30 % of the current equipment inventory.

Background: Progress continues with inspection of electrical equipment at the NSLS for compliance with NRTL certification or EEI inspection. This target is aimed at keeping focus on that program and to assure that 30% of the department equipment is inspected by the end of FY 07.

- a. Track inspection progress and provide quarterly reports on that progress.

Responsibility: Aloj
Due date: Quarterly (starting 01/2007)

PEMP's

4) Implement a safety observation process for NSLS managers through the section head level.

↓
behavior

Background: An important Laboratory initiative is to implement a safety observation program for all Level 1 and Level 2 managers. The NSLS has chosen to extend this requirement to the department section head level.

STOP program -

- a. Conduct training for NSLS management to the section head level in how to conduct and record observations.

Responsibility: Ackerman
Due date: 02/28/2007

Tier 1 -
"condition"

mtg: meets every other Tues -

review "STOP" obs -

verified - 3 HRS / month for the Director